Keep Your Card in This Pocket

Books will be issued only on presentation of proper library cards.

Unless labeled otherwise, books may be retained for four weeks. Borrowers finding books marked, defaced or mutilated are expected to report same at library desk; otherwise the last borrower will be held responsible for all imperfections discovered.

The card holder is responsible for all books drawn on his card.

Penalty for over-due books 2c a day plus cost of notices.

Lost cards and change of residence must be reported promptly.

PUBLIC LIBRARY
Kansas City, Mo.

Keep Your Card in this Pocket

BERKOWITZ ENVELOPE CO., K. C., MO.

THE BOOK OF PLAY PRODUCTION

COSTUME PLATE FOR "THE DOCTOR BY COMPULSION."

THE BOOK OF PLAY PRODUCTION

FOR LITTLE THEATERS, SCHOOLS AND COLLEGES

BY

MILTON SMITH

HEAD OF THE DEPARTMENT OF ENGLISH, THE HORACE MANN SCHOOL FOR BOYS, AND INSTRUCTOR IN ENGLISH AND SPEECH, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK CITY

INTRODUCTION BY

BRANDER MATTHEWS

D. APPLETON AND COMPANY

NEW YORK :: LONDON :: MCMXXVI

PRINTED IN THE UNITED STATES OF AMERICA

INTRODUCTION

THE historian Froude called attention to the fact that in Tudor England "there was acting everywhere," on the village green, in the baronial hall, in the courtyards of the inns and in the Inns of Court. As no great general was ever born in a race of cowards, so no great playwright was ever developed except in a people who were devoted to the drama. It was the widespread interest of all classes in England which made the path straight for Shakespeare's predecessors and which made possible the triumphant expansion of his own many-sided genius.

It augurs well for the future of the drama in the United States that there is now "acting everywhere," not only that of professional performers in the regular theaters but also (and especially) the ardent and ambitious strivings of amateur players in schools and colleges in open-air theaters and in the Little Theaters which have been springing up in every state of the Union. The performances of these aspiring groups are often vigorous and stimulating although they are sometimes hesitating and uncertain; but however inadequate they may be on occasion they are all significant of a widespread interest in the drama.

It is for the benefit of these various organizations that Mr. Milton Smith has prepared the chapters that

follow, chapters which are intended to guide the faltering footsteps of the novice, to emphasize sound doctrine about the drama, to supply practical directions for the production of plays and to provide answers for most of the questions which arise in the long labor of "putting on a show."

For the service which he proposes to render the writer of this book has the three necessary qualifications. First, he has thought out for himself the essential principles of play production and he keeps this theory firmly in mind. In the second place, this theory is the direct result of his own experience; he has done himself repeatedly what he is here advising others to do. And thirdly, he has not only himself practiced the novel and intricate art, he has shown others how to practice it; he has taught it to large classes year after year. My own experience as an instructor has made it plain to me that no one can write a textbook likely to be really helpful who has not himself taught the subject whereby he has made himself acquainted with its difficulties and has learned how to make his approach to the student.

Mr. Milton Smith's competence for this work is made manifest in the first paragraphs of his first chapter in which he has set forth the fundamental duty of the play producer—to make alive and vivid on the stage the drama, tragic or comic, which in the study —that is, on the printed page—is only "an intellectual conception." The printed page of a play gives us the words to be spoken and a few directions for the acting and the mounting. But the play does not start to life

until it is animated by the actors and until it is properly prepared to make its full impression on the spectators "by ideas, sounds, colors, movements, lines, and all the other elements that move one in the theater."

BRANDER MATTHEWS

ACKNOWLEDGMENT

The author wishes to express his grateful appreciation to BRANDER MATTHEWS *and* HATCHER HUGHES, *to* PROFESSOR FREDERICK H. KOCH *of the University of North Carolina, to* PROFESSOR FRANKLIN T. BAKER, PROFESSOR ALLAN ABBOT, *and* PROFESSOR AZUBAH J. LATHAM *of Teachers College, Columbia University, to* JOHN MULHOLLAND, R. P. BAKER, *and* CHARLES BERNSTEIN, *and to his many students and coworkers in the fascinating field of play production.*

CONTENTS

ILLUSTRATIONS

THE BOOK OF PLAY PRODUCTION

CHAPTER I

POINT OF VIEW

The Modern Conception of a Play

A play is a story designed to be presented by characters in dialogue and action. The lines to be spoken and the stage directions to be carried out, as written down in a manuscript or printed in a book, are not in the truest sense a play at all. They are the directions from which a play can be made. They become a play by being played, in the same way that a song comes into existence only as the printed words and notes are sung. It is an ancient maxim that "No play is a play until it is acted."

But, according to the modern conception, acting alone does not produce a play; for a play is not merely an intellectual conception of an incident gathered from the movements and the words of the actors. It is a far bigger thing. It is an impression made on the spectators by ideas, sounds, colors, movements, lines, and all the other elements that move one in the theater. It is an emotional reaction to these elements, and to many

others that are too subtle to be analyzed out of the total situation. In brief, a "play" is an effect made upon an audience.

Definition of Play Production

Play production, then, is the process of building up this effect. It is an attempt to translate the artistic vision of the author into a medium that will affect the spectator in the same way that the author has been affected. Play production is the union of two elements: the first is the author's idea, and the second is the interpretation of that idea by actors, costumes, scenery, lights, and many other details. It is impossible, and entirely unnecessary, to decide which of the two elements is the more important. They cannot be separated, for they have no real existence apart from one another. An unusually proficient bit of impersonation, a cleverly designed set of scenery, or an especially skillful use of lights—these things may hide the emptiness and the lack of value in the play itself. On the other hand, a good play may be entirely ruined by a poor performance. A good musical score may be badly played, and a poor score may be well played. But good music and good plays are created only by the combination of skillful writing and proficient performance.

It is the purpose of the following pages to seek out the principles and to analyze the processes that tend to make a proficient performance. "When we take up the study of any art," says Professor Brander Matthews, "we find that there are two ways of approach.

We may trace the growth of the art, or we may inquire into its processes. In the one case we consider its history and in the other we examine its practice. Either of these methods is certain to lead us into pleasant paths of inquiry," [1] It is the second of these paths, the one leading into the realm of practice, that we are to follow.

Unity of Play Production as an Art

In this inquiry we should be guided by the idea that in so far as the practice of dramatics is an art it must have unity, just as do the arts of painting, or singing, or writing. There cannot be one dramatic art for the amateur and one for the professional practitioner, nor one for the college and one for the kindergarten. Differences must be of degree, and not of kind. The only real division is between good art and bad, between practice that is successful and practice that fails. Hence, the nonprofessional, to whom these pages are addressed, should study dramatic art wherever he finds it practiced, and imitate what is good and avoid what is bad. Professionals, from the nature of the situation, usually develop a much more perfect technique in any art than the amateurs. On the other hand, they often lose the spontaneity that gives value to the work of the nonprofessional. Moreover, in the practice of dramatic art, amateurs often have the advantage of being more independent of financial success; hence, they can be much bolder in experimentations. The aim of amateurs may well be to keep their joyous spirit and

[1] Brander Matthews, *A Study of the Drama* (Houghton Mifflin Co., Boston, 1910), p. 4.

their freedom, and to add the greatest possible measure of professional technique and excellence.

The Age and Importance of Amateur Dramatics

Historically, in the countries of modern Europe, the amateur play producer is the original one, and the professional is a newcomer in the field, who can trace his ancestry back a mere three centuries. But it was more than a thousand years ago that the priests of some unnamed medieval cathedral decided to vivify the reading of the Bible for some particular service by taking parts and reading them dramatically. From this simple beginning grew the elaborate structure of medieval miracle plays, which for many generations engrossed the energies and satisfied the dramatic longings of our ancestors. It is difficult for us, at this distance, to gain an adequate idea of what the miracle plays meant in the life of the people.[2] The energy and the devotion that the peasants of Oberammergau put into the production of their Passion Play once a decade is an illustration of what occurred yearly in many villages and towns throughout Europe.

And out of this great folk art grew the first, and perhaps the greatest, flowering of dramatic art. Shakespeare and the other Elizabethan playwrights in England, Molière in France, de la Vega and Calderón in Spain—these great artists were among the first generations of professional men of the theater. They

[2] There are many interesting studies of this subject. See the *Cambridge History of English Literature,* for an excellent discussion and an extensive bibliography.

could never have existed but by virtue of the thousands of amateur playwrights, actors, and producers from whom they and their fellows learned their art. The amateur play producer may take pride in his ancestry. He traces it back to the dawn of history.

Modern Amateur Dramatics

With the rise of the professional theater, three centuries ago, the amateur theater became less and less important; but within our own generation, indeed mostly within the last ten years in the United States, there has been a rebirth of interest in the nonprofessional theater. The giving of plays has become a "movement," dignified by the name of the Little Theater.[3] In schools and colleges play production is taken up more and more seriously as a worth-while art. Few schools and few communities in the United States are now without amateur play-producing groups of one sort or another. It is, perhaps, not too much to say that we have seen the birth, or rather the rebirth, of a great folk art. Partly as a result of this activity, there have been radical and important changes in the professional stage. And it is not beyond the bounds of possibility that we, or our descendants, may see a newer and more glorious flowering of dramatic art than that which made the Elizabethan era the golden age of English literature. A nation of amateurs are sure to pro-

[3] Books on this subject are: Sheldon Cheney, *The New Movement in the Theater* (Mitchell Kennerley, New York, 1914) and *The Art Theater* (Alfred A. Knopf, New York, 1925); Constance D'Arcy Mackay, *The Little Theater in the United States* (Henry Holt & Co., New York, 1917).

duce a high professional art. Music-loving Italy and Germany, where every citizen is an amateur musician, have produced the greatest modern musical artists.

Already the modern nonprofessional theater has contributed much. Many of our most promising professional playwrights first saw their plays performed by amateur groups. The professional stage workers who had their first experience in amateur groups are too numerous to mention. If the movement had done nothing but produce the few great professional theaters that have grown out of amateur organizations, such groups as The Theater Guild and The Neighborhood Playhouse of New York City, it would have had a notable influence on the American stage. The action and reaction between the amateur and professional practice of an art must always be a close and important relationship.

But this widening circle of interest in nonprofessional play production has not been caused by any widespread desire to "uplift the drama." Its basis is much truer and more fundamental. Like all other true arts, the dramatic art is based on delight in creation and in self-expression. And it has the advantage that it can be practiced by a small group, or by a whole countryside, just as it used to be in medieval Europe. It requires and coördinates a multitude of activities—activities as diversified as directing, managing, designing, acting, writing, carpentry, painting, stage lighting, costuming, and so on.

This is the point of view from which dramatic art has been approached in the following pages. After a

discussion of the value and necessity of a permanent organization, if dramatics are really to be practiced as an art, the various activities are described in detail. These activities fall under three heads, and may be described as (1) acting, (2) stagecraft, and (3) business. Naturally the organization suitable for play production should show this threefold division (see pages 16 *seq.*). The chapters dealing with the choice of players and the conduct of rehearsals (Chapters IV and V) deal mainly with the first division. The second element, stagecraft is discussed in the chapters devoted to the technical aspects of play production (Chapters VI–XIII). The business department is then considered (Chapter XIV). But the divisions are by no means mutually exclusive. It cannot be too often repeated that the dramatic art is a unified subject, and so it must be considered if it is to be a true art.

This book is by no means a complete inquiry into the dramatic art. But the attempt has been made to describe all the necessary processes with such fullness that a clear idea may be gained of them. It is hoped that the workers will be able, with the aid of the table of contents and the index, to find specific aid in any branch—from such general processes as how to control rehearsals to such specific details as how to tack canvas on to flats, or how to make frames for gelatines. And if, for the sake of brevity or clearness, the author has sometimes been too dogmatic, he hereby denies all intention of being so. There can be no absolute rules for any art process. And dramatic art, or so it seems to some of us, is the art that covers the

widest field. It is as all-embracing as life itself, for it involves at times the practice of all the other arts and all the other crafts. And he who would excel in it may well pattern himself on Bacon, who was guided by the ambition to "take all Knowledge for his Province."

CHAPTER II

ORGANIZATION

The Value of a Permanent Organization

The organization of the producing group is an important factor in the economical and effective process of play production. The process is made tremendously easier if there is a permanent group. The old system of getting together a number of amateurs in a community and giving a play is fortunately becoming very rare; "amateur theatricals" are giving place to non-professional play production of a much more worthwhile variety. In the school or college the exigencies of the situation often demand that classes or even less well-organized groups be allowed, or even encouraged, to produce plays. But in both community and school, the superiority of some permanent dramatic organization over constantly changing groups is so obvious that argument should be unnecessary. The full value of dramatics can never be secured unless there is some method of attracting and discovering ability, and giving it a chance to grow. Newer and untried members can be started in humble rôles and less important positions, and advanced as their progress warrants, until they are able to bear heavy executive and artistic burdens. They can learn from their predecessors and teach their

successors. In this way a valuable mass of experience should be rolled up.

The form taken by the permanent organization should be one that will allow the ablest members of the group to control the activities—this is, perhaps, the only rule that can be laid down for guidance. Two different types of organization are found. The first is that controlled by a board of directors, and may be called the typical Little Theater organization. The second is the more common club type of organization, with a president, secretary, treasurer, and other officers.

Membership

In either case, however the group is organized, one important principle should be kept in mind: the membership should be comparatively large—much larger than it usually is. There should be room for every one who has an interest that can be tied up with play production—every one, that is, who is willing to manifest that interest in some concrete manner. No group of actors can make a successful organization. For every actor there should be two or three other persons who are interested in scenery and costume designing, in carpentry and painting, stage managing and stage lighting, business managing and advertising, or in any of the other activities that must come together in the full process of successful play production.

Of course, it is probably unwise to admit every one who merely expresses a wish to become a member of such a group. But every one who wishes should be

given an opportunity to prove his ability, in acting, or in any of the varied activities of stagecraft. He should be allowed to become a member of the organization by successfully doing definite work of some sort. Those who wish to act should be encouraged to report to the director when plays are being cast, and they should be allowed to become full-fledged members only after they have played in a performance. Those interested in the crafts ought to be on the list of the stage manager, who should give them work as opportunity offers. And prospective business managers should also be given the chance to prove ability in that field. Only by some such system can amateur dramatics grow into the great democratic art that it should be.

A. OFFICERS OF THE PERMANENT ORGANIZATION

Executive Head

The executive head of a dramatic club is usually a president. He will preside at meetings, appoint committees, and in general guide the policy of the organization. In student clubs, where there is a faculty director as well as a student president, the faculty director may often assume actual charge of the work, because of his superior skill in play production and his comparative permanency in the club. Perhaps it is wise not to define the duties of these two officers too sharply, but to allow the situation and their tact to govern. The executive head of a Little Theater may be a director. Sometimes he is a salaried official, who gives a great part, or all, of his time to the work. In addition to

being the executive head, he should be able to assume artistic control and to direct the actual work of play production.

Treasurer

A treasurer should have the usual duty of controlling the funds of the organization. Some Little Theaters have a professional business manager.

Secretaries

The secretarial work is often very heavy, and should usually be heavier than it actually is. It may, therefore, be wise to have several officers to share in this labor. There might be a corresponding secretary to carry on the duties implied by the title—write official communications, keep files of letters, etc. This officer might well assume the duties of press representative, also, and do what he can to keep the organization and its activities before the eyes of the community or the school. A recording secretary might keep the minutes, and he should keep fuller records of activities than is usually done. He should keep a file of programs and reports of performances, a collection of newspaper clippings and criticisms, pictures of performances and actors—in short, everything that may be of future interest or that will help to build up a tradition. Clubs having the use of an auditorium should make this theater a picture gallery. They should display photographs of their own performances, sketches and designs, old programs, etc. It is a simple matter, by a skillfully planned campaign, to produce an odor of great and respectable

antiquity in two or three years. The value of this sort of tradition is great.

Caretaker of Club Property

One duty that should be performed by the officers of a dramatic club is so often neglected in schools and colleges that it may be better to have a special officer for it. That duty is to act as the caretaker of club property. He might be called the caretaker, or the trustee, or some such title. The office should be competitive, being filled by the appointment by the outgoing officer of one from among the candidates who show the greatest skill. This official is really a permanent stage manager, but he does not need to stage manage every performance given during the year. However, he checks off the scenery and property taken from the store for any given performance, gives his permission to its being rebuilt, and sees that as much of it as has future usefulness is saved after the performance. Only by such a scheme can the proper physical requirements be built up, so that elaborate production becomes a more easy and less expensive matter.

A similar duty should, of course, be performed in respect to costume. In small organizations it may be done by the same official, but in larger ones a separate office may well be created. Master (or mistress) of the wardrobe is an ancient and appropriate title.

Executive Committee

To avoid the obvious difficulty of attempting to settle questions of policy or detail in general business meet-

ings, especially where the organization has a large membership, it is wise, probably, to have a governing board of some sort. Most Little Theaters have a board of directors as a governing committee. For a dramatic club, a small executive committee, consisting of the officers, or some of them, and a few elected members, can function much more easily than the large body of members; but it is usually wise to bring the decisions of such an executive committee before general business meetings for approval. Not only does such a procedure lead to a better feeling and more general interest, but valuable suggestions are often thus received from unexpected sources that might otherwise be lost.

Special Members

It is often helpful in school and college dramatic clubs to have degrees of membership. One excellent method is to give an award of some sort for dramatic service, comparable to a "letter" in athletics. A point system is sometimes useful. For example, playing a major part in a performance, or being a manager of some sort, might count two points; while a minor part or an assistant managership might count but one. An accumulation of a certain number of points, five or seven or any predetermined number, might give membership in this higher class. Those having this award, which may be made obvious by their having the right to wear a pin or an emblem of some sort, will constitute a small inner group of the most experienced members. They may have special voting privileges, or the right to

attend certain special meetings, or whatever authority is dictated by fancy and the situation.

B. ORGANIZING FOR A PERFORMANCE

Whatever the organization of the producing group, whether it be as a Little Theater or a dramatic club, it will probably be necessary to form a distinct and definite organization to control each and every performance, or series of performances. When a play is being given by a temporary group of some kind, such as a school or college class, the need for this organization is still more acute. To attempt a performance without a complete organization for it, is to court confusion and disaster.

The Director

At the head of this organization should be, of course, the director or the producer. In the professional theater, the producer is the financial backer of the enterprise. He is sometimes his own director, and sometimes he hires some one to produce the play for him. A newer name for this official, that has crept in from Germany, is *Regisseur*. He is the controlling artist, the master mind. He coaches the actors, makes or approves of the scene and costume designs, works out the lighting, and, in general, builds up the production. In all amateur producing groups, the aim should be to develop directors, for the director is the true dramatic artist. In schools and colleges, experienced students should be given opportunities to direct, perhaps under the watchful eye of the faculty director.

In a program of one-act plays, a student assistant director may well be put in charge of each separate play.

Sometimes the director may have special assistants, responsible to him, and connected with the general scheme only by their relationship to him. He may have a special assistant to direct the music or the dancing, if they are demanded by the play, and if he is himself unable to direct them. Or he may have an art director, to advise him in that field. Or he may have a coach to help the actors with their lines, or their pantomime, or with some other special features. Occasionally he may leave the directing of the actors entirely to another person, who may be called the coach, and who might be fitted into the scheme between the actors and the director himself. But the presumption is that the director himself does the coaching. There may be organizations, too, especially when the director is engaged by a committee for one performance only, in which the business manager is not responsible to the director. In such a case, there is in reality no director, but only a coach. But play production will usually be most efficient if some one person, the director, is the general executive and artistic head of the performance, controlling and coördinating all the other activities.

Under the director, the activities fall into three distinct divisions.

Acting

The first division consists of the actors. They are directly responsible to the director.

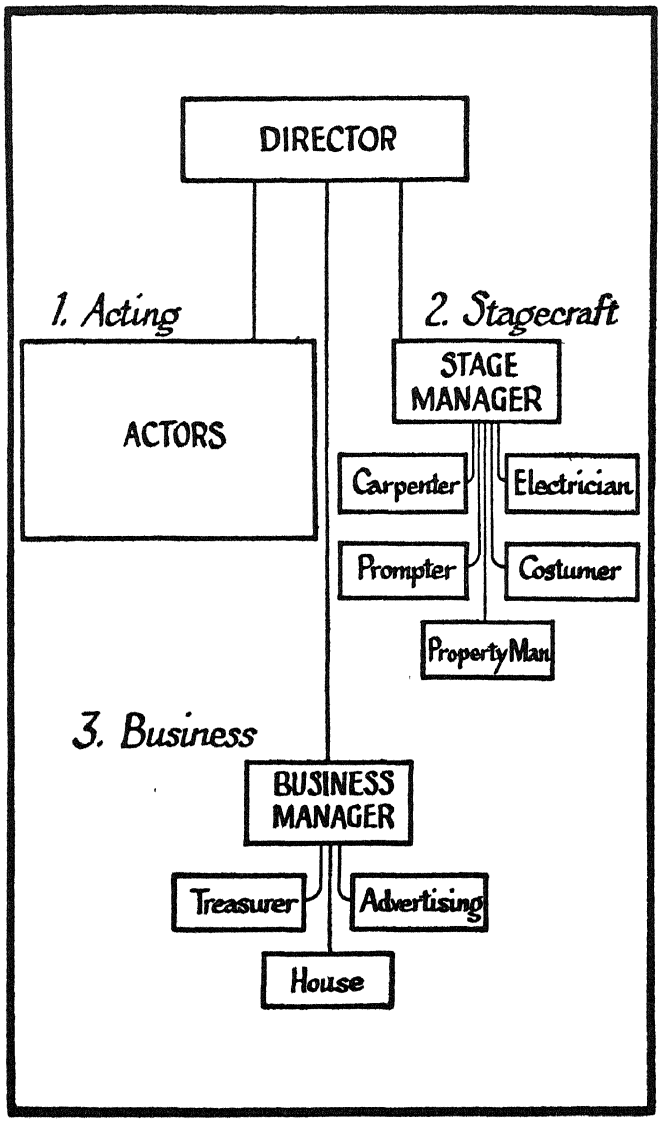


FIG. 1.—DIAGRAM OF CORRECT ORGANIZATION FOR A PERFORMANCE.

Stagecraft

The stagecraft group is the second division. At its head is the stage manager, or stage director. He is really lieutenant to the director, and aids him in carrying out his ideas.

In the absence of the director he is in charge. In professional performances that have a run of any length, the director is usually absent after the play begins to go smoothly. The stage manager is then responsible for all that goes on back of the proscenium. He is the back-stage commander. He must see that scenes are set and struck properly, that the actors are in their entrances, correctly costumed and made up, that the performance starts promptly, and that everything runs smoothly.

One of his principal assistants is the stage carpenter. When the scenery was built and painted in the theater, as used to be almost universally the case, the stage carpenter was in direct charge of the operation. Now he usually receives it from the studio, has charge of it, makes whatever changes may be necessary in the stage, and performs the other duties implied by his title.

The electrician has charge of the lighting. His duties are to arrange the lights so as to secure the effects demanded by the director (not always the easiest of jobs!) and then to see that the lights are properly worked throughout the performance.

The prompter is the next important assistant to the stage manager. He holds the book of the play, gives the cues to actors who forget their lines, and gives the

signals for off-stage noises, bells, sudden lights, etc. Often he is assisted by a member of the company entitled the call boy, who gives the actor warning that his entrance is approaching, reports to the prompter that the actor is in his proper place, and aids the play to go without a hitch. The prompter usually gives the signals for the curtain, too, and sees that the stage is clear, or that the proper actors are on, before the curtain rises.

The costumer, is, of course, in charge of the costumes. In olden days he, or she, often had charge, under the director, of the purchasing of them. Now, when most professional performances are costumed after designs by a special artist, the costumer (often called the mistress of the wardrobe) receives the costumes, sees that they are properly distributed, and aids in their care and repair.

The property man has charge of the properties, which are all the articles used in the performance not part of the furniture of the settings, and not distinctly part of the costumes. Such articles might be walking sticks, pistols, fans, lights, or in fact almost anything. The property man usually has a station somewhere on the stage where he can have a closet or a box. He has to be at the proper entrance to give the actor whatever property he needs as he goes on—and he has to secure the property again afterwards if it is to be used again.

Business

A third division is that of business management, at the head of which is the business manager. His

assistants are usually a treasurer (or box-office man) who sells the tickets and handles the money, an advertising manager or press representative who controls and produces publicity, and a house manager who assumes the responsibility for the audience after they are in the theater. He hires and trains the ushers, looks after the distribution of programs, sees that the ventilation and heating are proper, and handles the audience in emergencies.

Combinations of Offices

In an amateur performance some of these offices may be combined with others. The business manager may assume the duties of the treasurer and the house manager. One person may be stage manager, carpenter, electrician, and property man. Indeed, some teacher-directors often assume all of these offices themselves—which is very unwise! But even though combinations of offices are properly made, the thing to be remembered is that all these functions have to be performed and should be provided for.

Necessity of the Threefold Division

In general, too, there should be a pretty distinct division between the three departments. The stage manager sometimes plays a minor part on the professional stage, but this is usually to save the salary of one actor. If it is necessary to use actors in the business department, or as members of the producing staff, their dual position ought to be distinctly recognized. And this threefold division of a performance exists

no matter how large or how small the production. Even in a kindergarten class room, a child might well be appointed to act as business manager in the case of any sort of performance. His duty is to see that the audience is comfortably seated, and to act as host. The stage manager might move whatever articles are necessary, and see that a space is cleared for the performance, even though he has no other duties to perform. Children delight in an organization that is professional.

C. POSSIBLE FUNCTIONS OF A PERMANENT ORGANIZATION

A live Little Theater or dramatic club will probably not be content merely with the giving of performances. It has other possible functions in the community or the school. Members may meet for the study of phases of play production. They may bring lecturers, or even professional dramatic troupes, before their public. They may attend dramatic performances of professional or other nonprofessional groups. They may build up a dramatic library, and strive in general to raise the level of dramatic knowledge and appreciation. They may hold meetings for the study of plays.

The fostering of original dramatic composition is another function that may be performed by a dramatic organization. Contests may be held, the awards being performances of the winning plays. Sometimes a local group of playwrights may take the same theme or the same subject in a play contest. Each member of a play-writing group of The Drama League Players, of

Washington, D. C., was to develop the Enoch Arden situation in some new and original form. The winning play, "The Brink of Silence," by Miss Esther E. Galbraith, has had many successful performances, not only by The Drama League Players of Washington, but by many other Little Theater groups. Young playwrights, in high schools, who find difficulty in finding original material, might well be encouraged by contests to produce good dramatizations of stories and poems. The treatment of historical characters and historical situations is another profitable source of drama.

Play production tournaments may be another interesting and valuable activity. The annual Little Theater tournament of the New York Drama League has been a most successful venture; and other groups throughout the country, such as the Playmakers of the University of North Carolina, conduct successful tournaments for the amateur groups in their states.

There is no lack of possible activities for the ambitious group.

*

CHAPTER III

CHOOSING A PLAY

Some General Considerations

The choice of plays is most important to the success of any amateur producing group. Probably the most common and satisfactory way of solving the problem is to have a small play-reading committee constantly on the lookout for suitable plays. The final decision as to the play or plays to be produced may well be left to the vote in a general meeting of the organization. Directors, especially teacher-directors, make a mistake in attempting to force the group to do a play for which there is no general sentiment. It is usually a simple matter to convince a group, by a properly planned campaign, that a certain play is desirable; but if they cannot be persuaded, it is much better to produce something else. The whole-hearted desire of the members to do a play is the director's greatest aid.

The best safeguard in choosing plays, in either Little Theaters or dramatic clubs, is to have a carefully planned program which makes a hurried choice unnecessary. It is better to be on the lookout for opportunities to perform previously chosen plays than to be confronted with an occasion for which a play must immediately be chosen. That is, a good organization

always ought to have several plays on its list that it plans to produce whenever occasion allows.

A number of play bibliographies,[1] a selection of publishers' catalogues,[2] and a collection of play books [3] might well be among the property of every producing organization. If all the members are encouraged to be constantly on the watch for suitable plays, to bring suggestions to the play-reading committee, to talk the

[1] Useful bibliographies are:

Joint Committee of the National Council of Teachers of English and the Drama League of America, *Plays for High Schools and Colleges* (Chicago, 1923). (This may be ordered from the Council, 506 West 69th Street, Chicago.)

S. Marion Tucker, *Plays for Amateurs* (H. W. Wilson Company, New York, 1923).

Frederick H. Koch and Elizabeth Lay, *Plays for Amateurs* (The Bureau of Extension, University of North Carolina, Chapel Hill, North Carolina).

Frank Shay, *One Thousand and One Plays for Little Theaters* (D. Appleton & Co., New York, 1923).

There are many other excellent bibliographies of this sort.

[2] Two of the best-known publishers of plays are Samuel French, 28 West 38th Street, New York City, and Walter H. Baker, 5 Hamilton Place, Boston, Massachusetts. There is a fairly complete list of publishers of dramatic literature in the first bibliography listed above.

[3] Such books as:

Frank Shay and Pierre Loving, *Fifty Contemporary One-Act Plays* (D. Appleton & Co., New York, 1924).

Frank Shay, *A Treasury of Plays for Women* and *A Treasury of Plays for Men* (Little, Brown & Co., Boston, 1925).

——— *25 Short Plays* (International), (D. Appleton & Co., New York, 1925).

Margaret G. Mayorga, *Representative One-Act Plays by American Authors* (Little, Brown & Co., Boston, 1919).

Barrett Clark, *Representative One-Act Plays by British and Irish Authors* (Little, Brown & Co., Boston, 1921).

Montrose Moses, *Representative One-Act Plays by Continental Authors* (Little, Brown & Co., Boston, 1922).

Burns Mantle, *Best Plays* of 1920-1921, 1921-1922, etc. (Small, Maynard & Co., Boston).

choice of plays over with one another, there need never be a mad, eleventh-hour scramble for something to play.

Specific Considerations

In making actual choice, certain specific considerations should constantly be kept in mind.

1. *The Actors.*—The first consideration is the possible actors, their number, their ability and experience, and their maturity. A play calling for a large cast must be ruled out if only a small number of actors is available, for no system of an actor playing two parts, "doubling," is ever very successful. Actors of experience and trained ability can, of course, play a much more difficult play than those who are without much experience, and the maturity of the actors must determine the emotional tone of the play. It is a true statement that you may exceed the intellectual experience of the actors if your play is not beyond their emotional grasp. For example, the emotions of the characters in Shakespeare's plays, with but few exceptions, can be understood by high-school students, but the subtle analysis of Ibsen is usually beyond them. The presence among the actors of one or two persons of exceptional ability or of peculiar physique may make possible some play that would be otherwise out of the question. On the other hand, in certain plays a peculiar ability may be necessary in a certain rôle, making it inadvisable to try the play unless there is an actor who is obviously suited for that rôle. It would be unwise to choose "Henry IV," for example, with no one in sight who

would make a suitable Falstaff. In all these ways, the actors govern the choice of the plays.

2. *The Audience.*—The nature of the probable audience should be another consideration. Their age and experience, their degree of sophistication, and their previous theater-going opportunities, are all matters of importance. A play suited for an audience of adults may lack anything to interest an audience of children; and a sophisticated audience may enjoy a smart comedy that would bore a less sophisticated one. Moreover, a play that has been done recently in the town or city, or with which the audience is very familiar, usually starts with a severe handicap. Many teacher-directors are troubled by the old problem of whether to play a popular and nonliterary play to a large and enthusiastic audience, or a play of greater value to an empty hall. I should choose the former, without a moment's hesitation. You must start with your audience—and actors—where they are. A desire to play and to see better things usually grows in a community, and a dramatic club can do nothing of greater value than to bring about such a desire, and satisfy it.

3. *Production Possibilities.*—A third consideration is the equipment for production: that is, the stage conditions and the ability of the producing staff. Determining factors may be the size of the stage, the facilities for designing and making scenery, the number of workers, their abilities and the time at their disposal, the lighting possibilities, and other specific facts. A play must be chosen that can be set and costumed with the facilities at hand. A simpler production, well

done, which gives the staff courage and experience to carry over into more complicated work, is better than an elaborate play less successfully done. Of course, the amateur's reach should exceed his grasp. He should be ambitious, and his success cannot always be measured by the measure of professional success. But sustained and planned effort is the best method by which to attain ambitious and elaborate performances.

4. *Literary Value.*—A fourth and final consideration may be the literary value of the play. It is an extremely difficult matter to determine what constitutes literary value. But perhaps we may best think of it as that element present in a play when "the finer attributes of structure and style are added to essential theatrical effectiveness." [4] Nothing tests literary value like play production. In a play which has mere theatrical effectiveness, the lines and the situations soon become tiresome. Actors and directors sometimes feel that they cannot endure another repetition of the play. But a great play, which has both theatrical effectiveness and literary value, is a constant pleasure; repetition brings an added interest and delight. For this reason, if for no other, literary value may well be required by the amateur producer.

Possibilities of the One-Act Play

Of late years the one-act play has grown enormously in popularity, and this growth is partly the cause and partly the result of the rise of the Little Theater. It

[4] Brander Matthews, *A Study of the Drama* (Houghton Mifflin Co., Boston; 1910), p. 8.

has many advantages for the amateur producer. A program of one-act plays usually provides a greater variety of interesting problems in acting and producing than a long play. And, in general, a short play is easier for the amateur actor. The problem of successfully creating a character to be seen for a short time only, under stress of a single incident, is less than that of showing the consistent character development usually required in a longer play. A program of one-act plays must be carefully chosen to appeal to varying tastes. It is wise to include plays of various types, as a fantasy, a serious play, and a comedy or a farce. In many localities, however, the one-act play has still to make its way. But so many delightful and worth-while one-act plays now exist that it is wise to attempt to make them acceptable in a community.

The Need for Variety

In general, variety is the secret of success in the choice of plays for an amateur dramatic organization. After a successful long play, a program of one-act plays might well be attempted. A realistic play of modern life might follow a romantic costume play. To produce plays of one type only is bad; and to produce nothing but Shakespeare is little better than to produce nothing but modern Broadway successes. The successful producing group has a planned and varied program of worth-while productions—both behind it and ahead.

CHAPTER IV

CHOOSING THE PLAYERS

The Process of Casting

The process of choosing the players is called "casting." The problem is to find the person in the group best fitted by mental and physical equipment to play each part. This is referred to in the professional theater as finding the "type." Sometimes, in schools, the authorities have a feeling that persons of the reverse type should be chosen, because of the educational value that lies in the student's playing a part that takes him out of himself. Thus, a bashful boy will be chosen to play the braggart, or a forward girl for the timid country cousin. Whether or not this theory is true is perhaps open to question; but for public performances, casting by types seems the more logical method. It simplifies tremendously the labor of the director, and it makes for better performances. And children, like most other people, usually like best to play those rôles for which they seem best fitted.[1]

Method of Casting

In amateur groups, where there is a permanent director, he will naturally do the casting, with more or less

[1] For a discussion of the question of casting for educational purposes see Emma Sheridan Frye, *Educational Dramatics,* (Moffat, Yard & Co., New York, 1913), and A. M. Herts, *Children's Educational Theater* (Harper & Brothers, New York, 1911).

aid from other members of the group. There are several possible methods.

1. *Tryouts.*—Tryouts, which seem most democratic at first glance, consist of competitive reading for parts in the chosen play. If the play is unfamiliar, copies of it may be left in some generally accessible place—the greenroom, or the library. At definite given times candidates may appear before the director and his assistants, and interpret the rôles they wish to play.

2. *Interviews.*—Some directors, however, feel that competitive tryouts are very poor tests because the candidates are under such a strain. They prefer to have informal conversations with the candidates, so that they can better judge how they speak and act under more normal conditions.

3. *Past Experience.*—The past experience of the actors, according to other directors, is the only test for candidates. All new actors should be put in very minor parts, until they have showed ability.

Best Method

Probably some combination system is best. Old actors of the organization who have proved themselves may be cast for the parts for which they are obviously fitted, while some sort of tryout system will give newcomers a chance to prove their abilities. To cast entirely by tryouts is not wise, as a rule, for the director learns much about the ability of an actor from having coached him in a play, and this should be taken into consideration. Character, willingness to coöperate, reliability, and so forth, are all very important

things that cannot be learned by tryouts. Moreover, there are persons who read a part well, but who never get very much better than they are the first time. They do not work up in the rôle. Many a person who reads badly, and who makes a poor first impression, may ultimately play a character better than a person who reads well.

For all these reasons, an actor should never be allowed to feel that a character has been definitely "given" to him. Shifts during the early rehearsals are often necessary. The amateur actor must know that if some one appears who can play his part better than he can, or if he does not work into the rôle properly, he will be dropped, just as would be the case if he were playing on a football or baseball team. Some system of understudies, second-choice actors for important parts, is helpful in emphasizing the idea that the process of working up a play is a competitive one for the actors.

Some Special Considerations

In casting, each actor must be considered in his relations with the other actors, as well as in regard to his individual fitness for the part. Two persons who are going to appear together constantly, the hero and heroine, for example, must not only have voices that are pleasing in themselves, but voices that fit well together. Two persons of similar type—for instance two old men—must have dissimilar voices, so that they can easily be distinguished from one another. In the same way, physical characteristics must be considered. Lovers should not be two extremes in height, and yet

the man is usually larger than the woman. An interesting example of what may be done by skillful casting is Mary Pickford's moving picture version of "Little Lord Fauntleroy." In that picture, Miss Pickford played the part of Little Lord Fauntleroy, and also the part of his mother. The two characters rarely appeared on the screen together. In the scenes where she was the little boy, the other actors were all unusually large, and thus the star was dwarfed to proper boy size. When Miss Pickford played the mother, however, the other characters were smaller than normal, and thus she herself appeared much larger. In the rôle of the mother she appeared to be two feet taller than she appeared in the part of the son.

When women are to play the rôles of men both their size and their voices must receive special consideration. They must, as a rule, be considerably larger than the women in the cast; and their voices should have less range. Women who normally talk in a monotone, give the best illusion as men. When men are to play the parts of women, the younger they are the better. Boys of twelve to fifteen are usually very successful in playing women's rôles. All Shakespeare's women characters were written to be played by boys of this age, and Shakespeare never saw his parts played by any other sort of actresses. An older man can very rarely give any sort of an illusion. The parts of old women and comic characters, as the Nurse in "Romeo and Juliet," may be played by older men, and with much success. In fact, Molière, although he had women actresses in his company, sometimes indicates that men comedians

are to play the broadly comic women characters in his plays.

One thing that should not be neglected in casting, as in all the other activities in the process of amateur dramatics, is the carrying over of the experience of one performance into the next—and that is why a system of tryouts alone is unwise. Actors should receive credit for good work, and their abilities should give them special considerations in casting a new play. This implies a person who is permanently in charge of casting. Naturally, in a Little Theater, he will be the director, and in a school or college organization he will be the faculty director. Organizations which constantly change directors, or which hire different directors for each performance, should devise some scheme to give permanence and unity to this feature of the work. A casting committee is, perhaps, the most common solution. The Theater Guild of New York, for example, has a number of persons who direct their different performances, but the casting is done by the general director, who thus carries on the experience of the group. Most professional producers have a permanent casting secretary. The director of any individual performance should, however, be free to make whatever changes in the cast seem necessary to him, for the ultimate and only true test for casting is the abilities the actors show in playing together in the specific play that is being produced.

CHAPTER V

REHEARSALS

The Rehearsal as a Learning Process

Nothing is more important for the success of amateur dramatics than the conduct of the rehearsals; and unfortunately this is the most difficult part of play production. One can learn from a book how to organize for a performance, or how to make scenery, or the important facts about lighting. But the rehearsal process, like the teaching process, is a very subtle thing, depending almost entirely on the influence of personality. A good director, like a good teacher of any other art or craft, must be the product of experience. Nevertheless, there are certain suggestions that may be given; and the most important of these is the fact that rehearsing a play is a learning process for the actor—and for the director, too—and that it contains distinct and recognizable steps, like all other learning processes. The director will be tremendously aided if he will observe these steps, and aid each in its turn. Like the wise teacher, he must know that he cannot teach everything at once. If he is patient and tactful, many faults will correct themselves in the process of rehearsals. He must guide and hasten the process. He cannot twist it

out of its normal course. It is important, too, that the actors understand the process. They should know what is being attempted during each phase of the rehearsals —what is important, and what is, for the time being, unessential. Otherwise, they may be worried by the fact that they are not being aided to say their lines correctly when the director is wisely concentrating his attention on movement, or that the tempo seems too slow during the phase when the director is neglecting the tempo and bending every effort to work out each detail of characterization.

The Four Steps

Four distinct steps, or phases, are recognizable in the process: (1) during the first, the actors should become familiar with the idea of the play; (2) during the second, they work out the movement of the play, the entrances, exits, and changes in position; (3) during the third, all the details of characterization are studied and learned; and (4) during the last, the players work together for finish and unity of performance. These steps are not all equal in duration of time. The third will always require longest, and will probably occupy at least three-quarters of the time available for rehearsal.

Time Elements

It is difficult, if not impossible, to state how much time is needed to prepare a play, for that, too, varies with the experience and ability of the actors and the director. For a one-act play, however, six or eight

rehearsals will often be sufficient. The first one may be used for preliminary study, the second to work out the movement of the play, the next three or four for work on details, and the last one or two to pull the play together and for the dress rehearsal. There is such a thing as working too long on a play, so that the actors grow "stale." For a longer play, much more time is needed, depending upon the number of acts. Perhaps a convenient rough estimate is to allow at least five times as many rehearsals as there are acts; thus, a three-act play would need at least fifteen rehearsals, and a five-act play, at least twenty-five. After the entire play has been read and studied, the first act should be turned to. Two or three rehearsals ought to work out the movement and yield progress in the work on details for the first act. By the fourth or fifth rehearsal, it ought to be possible to work on both the first and second acts, the first for further details, and the second for movement. Then the first act may be gone over only at every second rehearsal, and the second and third acts taken up. Some scheme of this sort is essential. It is never wise to wait until the first act is perfected, before going on to the others. They should all be moving along together. Towards the end of the rehearsals, it is often wise to work on the last act first, and then to review the earlier ones. At the last two or three rehearsals, it ought to be possible to run through the entire play, with the acts in their proper order. The important thing to keep in mind is that each individual act will have to go through all of the four steps.

A. THE FIRST STEP: PRELIMINARY STUDY

Function of First Step

The first step is that during which the actors become familiar with the play. They should learn the idea of the author, master the story or the plot of the play, gain a clear conception of the characters they are to play, and study the interrelations of the characters one on another. This alone should be the purpose of the first step.

Ideas of Directing

Just how these first rehearsals should be conducted depends largely on the director's idea of himself and his functions. There are at least three distinct points of view from which a play may be directed.

1. *The Craig Idea.*—The first idea is that of Gordon Craig, as expressed in his era-making work, *The Art of the Theatre.* The director, he says, is the dramatic artist, who expresses himself by the aid of scenery, lights, movement, actors, noises, etc., in the same way that the sculptor expresses himself through clay. These media, therefore, should be as plastic and as unresistant as possible. The greatest actor is the actor with the body and voice that is most completely at the service of the director. The less emotion the actor brings to his interpretation of his part the better. The director will supply the emotion. The actor must be able to move and speak so as to express the director. Hence, the greatest actor would be a superpuppet, with

no individual ideas to interfere with those of the director.

2. *The Laissez Faire Idea.*—A second conception is what may be called the "laissez faire" idea. According to this conception, the actor is the dramatic artist, and he should be interfered with as little as possible. The director is merely a supervising artist, who leaves the actor free to work out his individual conception. The fewer suggestions he is obliged to make the better.

3. *The Proper Idea.*—A third, and probably a more helpful conception, is that of a director who is between these two. He does not absolutely insist on imposing his own conception on the actors, but he does not hesitate to help them where help seems to be desirable. This is certainly the proper idea where dramatics are conceived of as an educational process. Actors must be encouraged to develop their own ideas about the characters they are playing, but the director should be experienced enough to know when his aid is needed. The weakness of the Craig idea is that the superpuppet requires a superdirector. Directors who are not such are glad to have aid and suggestion from all possible sources. Even where the director has a very distinct impression of how a character ought to be played, the actor may aid in clarifying this impression or in changing it for the better, as rehearsals progress. The weakness of the laissez faire system is still more obvious: although producing a play is a democratic art, it *is* an art, and needs a guiding and unifying force; this the director must be. The true conception of rehearsals is that they are *a process of continuous growth under the*

guidance of the director, who both controls and is controlled by the actors and the situation. Only some such belief can justify dramatics as a worth-while cultural and educational process.

Methods of Accomplishing First Step

There are several methods by which the actors may become familiar with the play.

1. They may study the play individually before there is any general meeting. This process, with young actors, may be wasteful, as there is no way of correcting false impressions and of seeing that the actors agree on their general conceptions. Nevertheless, it enables the actor to use his ingenuity and imagination in the quiet of his study; and some actors work much better after a preliminary study of this sort.

2. The play may be read to the cast by the director, or the author. This reading usually gives every one a clear conception of the play, and of the various characters, which is a most desirable thing where time is short. It has the disadvantage of imposing the director's ideas, and sometimes even his mannerisms, on the actors. If important lines or scenes are read by the director in a certain way it is almost inevitable that many actors will thereafter read them in that way. The better reader and actor the director is, the more is this likely to be true.

3. There may be a general reading, each actor reading the lines of the character he is to play. The original impression thus comes from the actor. Such a reading frees the actors, but puts on the director the

burden of seeing that the conceptions are correct. If a general reading is the method used, the actors should be seated in a group or around a table. They should not be allowed to walk through their parts until the play has been read once or twice without movement. Some directors like to have the play read in this way as many times as possible in an evening, perhaps five or six times in the case of a one-act play; others, after one reading, begin immediately on the second step, and start to work out the movement.

Each director must find out for himself which method is best for him. If he has plenty of time, and wishes to develop the initiative of the actors, probably he will find the last method best; if he reads well, and has only a limited number of rehearsals, he will find the second a great time-saver. The third method is, perhaps, the most "educational." The first method is, perhaps, more adapted for groups of actors who are so inexperienced that they need the previous study to make a general reading of any value, or who are so experienced that they can do much for themselves.

B. THE SECOND STEP: WORKING OUT THE MOVEMENT

Function of Second Step

The function of the second step in rehearsal is to "block out" the movement of the play, to determine where actors are to come in and go out, and to decide their positions while they are on the stage. Incidentally, the general conceptions of the play should be clarified during this process. For a short play, one rehearsal, or a part of one rehearsal, may be sufficient

for this purpose. For a longer play, this process must be gone through for each act, perhaps several times. During this time, every one should be concentrating on the idea of movement. There should be no special attempt to have lines read with proper emphasis, for example; although gross errors should probably be corrected. But the fewer times the play is interrupted for anything but movement the better.

The Idea of Design

In working out the movement of a play, the director is like an artist designing a picture. Therefore, in order to be certain that the movement is worked out properly, he should know the settings and the costumes that are to be used, and all the other things that go to make up the picture. A stage model, and a set of costume plates (See Chapters IX and X) will be of greatest value. Some directors work out the movement of the actors in advance of rehearsal, using chessmen, or pins, as puppets to aid them to visualize the play. If the play is not being rehearsed on the stage where it is to be played, it is important that the size of the stage be known. A chalk line on the floor, showing the limits of the space, and the placing of the doors and windows, is helpful. The director must keep in mind the general ideas of picture composition. He must try to produce proper spacing, balance, emphasis, and mass and color value. One of the chief ideas that he should remember is that a well-grouped picture must have a center of interest, and one center only. He must decide what the important action is, and em-

phasize that by his grouping. The ancient idea of the triangle is a tried and true device. If A is a character that is the center of interest, he should, as a rule, be made the apex of a triangle which has its base parallel to the front of the stage. B and C are other characters, less important for the moment. If B becomes the central figure, he and A may change places, and so on. Of course, there must be nothing mechanical about the movement; it must be made to seem as free and natural as possible.

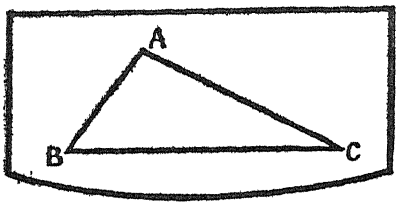


FIG. 2.—TRIANGLE TO SHOW CENTER OF INTEREST.

Symbolic Movement

The idea of symbolic movement is exceedingly useful, also. That is, the lines of force created by the movement of the play may be used to reënforce and help interpret the idea of the play. This idea is well explained by Mitchell, in his invaluable chapter, "Rehearsal," in *Shakespeare for Community Players.* He states that "every dramatic crisis is resolvable into terms of conflict, intervention, enmeshing, or the deliberation of delicately poised forces." [1] The "conflict" should be shown by the balancing of the forces opposed. Thus, Shylock and his friends should occupy one side of the stage, and across from them may be

[1] Roy Mitchell, *Shakespeare for Community Players* (E. P. Dutton & Co., New York, 1919), page 35.

the opposing force of Antonio, Bassanio, and their followers. "Intervention" occurs in the same scene, when Portia appears to solve the conflict. She intervenes by coming between the two groups, and turning from one to the other. The same scene may also show the idea of "enmeshing" if, after the decree against Shylock is pronounced, Gratiano, Bassanio, and others of the court gradually surround him and separate him from his friends who fall away from him, thus showing by symbolic movement what is happening psychologically. Movement that is real and lifelike will tend to be symbolic, whether or not the director and the actors are conscious of that term. When one actor separates two who are struggling, by forcing himself between them, that is symbolic movement. When an actor shows that he has changed his mind by leaving one group and walking over and joining another, that also is symbolic. But many a less obvious situation may be quickly and easily solved if the director has this idea of symbolic movement consciously in mind.

Some Suggestions

There are a few other general suggestions that should be kept in mind during this step of rehearsal. Properties should be used from the very first for all bits of business that require them. Even the movement may have to be changed if some property that has not been used earlier is introduced near the end of the rehearsals. Actors should be sure to work out to the limits of the stage. Amateurs especially are likely to huddle behind pieces of furniture or behind one

another. Each actor should write down the movement as it is worked out and as it applies to himself, and he should have a pencil for that purpose. The movement may have to be changed as the rehearsals progress, but there should never be any need of question about what has been decided.

C. THE THIRD STEP: WORKING FOR DETAILS, OR CHARACTERIZATION

Function of the Third Step

The third step is by far the most important, and it will usually take three times as long as all the other steps together. Its purpose is the perfection of details, or, to use a more technical term, the building up of "characterization." During this important phase the actors must study their manner of walking, of sitting down, of using their hands and faces, and of speaking each line. They must try to feel what the characters they are assuming would do in the situations in which they find themselves in the play, and they must by observation and study check up the details that they work out. Some of the most important details to be kept in mind are the following:

1. *Memorization.*—The memorization of the play should be perfected early in this phase. During the preliminary readings, and the rehearsals for blocking out the movement, actors usually read the lines from their books, becoming more and more familiar with them. Then it is wise, at a certain definite time, say after the fifth or sixth rehearsal, to announce that

thereafter no more books are to be used. If the actors are not line perfect, let them be prompted for their lines, no matter how much prompting is needed. If the play is not being memorized rapidly enough by the entire cast, prompter's rehearsals are often called. During these, the prompter teaches the actors their lines, and there is no attempt made to do anything else. There never need be a last minute scramble to learn the lines if the play is well directed. Some plays—those having many short rapidly-spoken lines, or those in which there is a confusing similarity of line and thought in different parts of the play—are difficult for a cast to memorize correctly. If actors meet and study their lines together, repeating them aloud and rapidly time after time in the proper order, with thought for nothing but the correctness of their readings, a group memory is established, which usually solves the problem. By some device or other, memorization must be assured early during this third step, for further perfection of detail depends on it. Books must be discarded.

2. *Vocalization.*—Correct vocalization is another detail that must be worked for at this point. Whatever sort of voice the character must assume, it should be a carrying voice that can be heard with ease throughout the theater. Actors of the "old school," such as Joseph Jefferson, had to a wonderful degree the ability to project a whisper to every corner of the house. Realism and naturalism, the latest varieties of acting, should not be carried to such a degree that the audience feel like intruders. Correct breathing, fully controlled, is most important for good vocalization, and directors who are

not capable of teaching correct breathing might profitably study some of the current manuals on speech. Firm breath control and correct enunciation are the secret. Enunciation should be sharp and clear cut. Vowels should be sustained, and final consonants must be pronounced, although exaggerated "elocutionary" speech should be avoided. A common fault of amateur actors, that is easily corrected at this point of rehearsal, is dropping the last few words of a sentence so that they are lost to the audience. Voices should not be dropped at the ends of sentences to such a degree that they become inaudible.

3. *Reading of Lines.*—A third important detail that should be perfected during this third step is the reading of the lines of the play. Actors must learn to give their lines meaning and expression. Each line should be said as if for the first and only time in order to give the audience what William Gillette calls "the illusion of the first time." [2] The play is likely to be successful to the degree that this illusion can be created.

Phrasing, or the opening out of the lines by the use of the pause, is an important element in correct reading. Macklin, a famous old Irish actor of Drury Lane Theater, most noted for being the originator of the modern method of playing Shylock, used to have what he called three pauses: a pause, a long pause, and a grand pause. One night, according to the story, the company had a new prompter, who constantly annoyed

[2] William Gillette, *The Illusion of the First Time in Acting* (A publication of the Brander Matthews Dramatic Museum, Columbia University, New York).

Macklin by interrupting him to give him the line. At length the audience was astounded to see the star rush to the wings, seize the poor prompter, drag him out on the stage, and cuff him. Then turning to the audience, Macklin said, "The fellow interrupted my grand pause." A burst of applause greeted the explanation, showing the concurrence of the audience in Macklin's estimate of the value of the grand pause. If the actor cannot estimate the right time for a pause, the director may have him count to himself up to a certain number, or may give him a silent line to say to himself.

This device of silent lines, called bridging, is also useful in aiding the lines to be said properly. A line or two may be invented to be said silently before or after the spoken words. Mitchell gives the following illustration:

> The line "Why, my lord!" is capable of being read a score of ways. It may be outraged astonishment, *"Heavens, you're mad.* Why, my lord! *What do you mean?"* It may be frightened surprise, *"What has come over you?* Why, my lord! *You're ill."* It may be incredulity, *"I never heard of such a thing.* Why, my lord!" . . . or in an effort to soothe, *"There's nothing to fear.* Why, my lord!" . . . or reproach, *"Surely you were never guilty of that!* Why, my lord! *I'm ashamed of you."* In each case the italicized words are spoken under the breath and establish an emotional context which gives perfect accuracy to the short, awkward line.[3]

Emphasis is another important detail that must be considered. Certain words are of great importance and must be given value by the way they are said,

[3] Roy Mitchell, *op. cit.*, p. 36.

while others may be slurred over. The thing to be avoided is the even, monotonous delivery that old-fashioned amateurs sometimes believed was demanded by acting.

4. *Business.*—During this third step will come the invention of business, which is behavior that is intended to interpret the character portrayed. Gestures, facial expressions, and all the other little details that give ease and lifelikeness to the characterization, should be worked out.

To state the whole matter briefly, during this third step the actors must learn their lines, they must say them so that they can be heard, and so that they carry the ideas of the author, and they must accompany the lines with interpretive business, or pantomime. In other words, they must begin to act.

The Art of Acting

Just what acting is has long been in dispute. The situation is well stated in a delightful old book, *The Autobiography of an Actress,* by Anna Cora Mowatt, the authoress of "Fashion, or Life in New York," and other dramas of the middle nineteenth century.

There are two distinct schools of acting, and it is a disputed point which is the greater. The actor of one school totally loses his own individuality, and abandons himself to the absorbing emotions that belong to the character he interprets. His tears are real, his laughter real, as real to himself as to his audience. Frequently, they are *more* real to himself than to his listeners; for the capacity of feeling, and the faculty of expressing the sensation experienced, are widely different. The current

upon which the actor is borne away may, or may not, be strong enough to bear the spectator upon its bosom. . . .

The actor of the opposite school, if he is a thorough artist, is more certain of producing startling effects. He stands unmoved amidst the boisterous seas, the whirlwinds of passion swelling around him. He exercises perfect command over the emotions of the audience; seems to hold their heartstrings in his hands, to play upon their sympathies as though upon an instrument; to electrify or subdue his hearers by an effort of volition; but not a pulse of his own frame beats more rapidly than its wont. His personations are cut out of marble; they are grand, sublime, but no heart throbs within the lifelike sculpture. Such was the school of the great Talma. This absolute power over others, combined with the perfect self-command, is pronounced by a certain class of critics the perfection of dramatic art.

Nearly every one who has dealt with the subject of acting is confronted by this problem: is acting emotional, and does the actor live the part, or is it intellectual, and does he merely suggest it? The question is not as academic, from the point of view of amateurs, as it may seem, for upon the answer depends the attitude of the director towards the actors during this entire third phase of rehearsals. Must the director work on the actors entirely from the inside, by suggesting the emotions that the character ought to feel, or may he suggest actual devices for securing effects? The truth is, of course, that neither extreme is correct. There must be some sort of emotional understanding of the character that is being portrayed, but the portrayal must certainly be illuminated by all the devices and effects that the intellect can suggest. Bernhardt

in her *Autobiography* explains that she was an emotional actor, while Coquelin was an intellectual one. But certainly, intellect played a great part in many of Bernhardt's finest and most finished pieces of acting; they were the results of her keen observation. And Coquelin, I have been told by an old actor of his company, used to stroll up and down the stage before his entrance, gesticulating, and muttering to himself, and "throwing himself into his part." Both elements must be present in any successful acting. A. B. Walkley, the dramatic critic of the *London Times,* argues that "actors not only ought to feel the emotions of their parts but, as a matter of fact, invariably do, whether they realize it or not." [4] But he adds, "No doubt, in the actor there is really a double consciousness. One side of him is acting, the other side is watching himself act, regulating and noting his effects, in short, controlling his art."

Acting Aids

The director of amateurs should keep both of these elements in mind. He ought to see that his actors understand and feel their parts emotionally so far as they can; that they react as freely as possible to the imagined situations in the play. But he ought also to help them develop that other self that is watching and regulating, and aid them to make external appearances and actions suggest the desired character. Specific aid may often be given by directing the attention of the

[4] A. B. Walkley, "The Psychology of Acting," *Vanity Fair,* February, 1926.

novice to certain definite external matters that have to do with the successful portrayal of character. They might be called acting devices, except that the use of devices makes acting seem more external than it should probably be. But it is a psychological fact that the simulation of the outward physical signs of an emotion actually arouses that emotion.

1. *Breath Control.*—In the first place, the importance of proper breathing can hardly be overestimated. "Emotion," says Curry, "must especially affect the breathing, or the muscles regulating breathing." [5] The reverse is also true; breathing affects the emotion. There is an appropriate form of breathing for every character, or even for each mood of every character. Laughter, gasping, weeping, and many other emotions, are aided by appropriate breath control.

2. *The Body.*—A second point that must always be noted is the way the body as a whole is used. Harshness, hatred, and anger usually bring about a feeling of tenseness and tightness, and the assumption of these feelings helps to portray these emotions. Small aimless motions suggest irritation or impatience. The very act of drawing the body up to its full height, and moving slowly and with dignity, brings about a sense of regalness and nobility. A lightness of body suggests youth and health, while a heaviness suggests age and illness.

3. *The Eye.*—The eye is a third important consid-

[5] S. S. Curry, *Imagination and Dramatic Instinct* (The Expression Company, Boston, 1896), p. 178. There is much interesting material in this book.

eration. It is an old rule of pantomime that "the eye always leads." Shiftiness of the eye is universally understood to denote treachery or insincerity; while a steadiness of gaze implies directness and honesty. Humility, scorn, thoughtfulness, and many other emotions are portrayed with greater ease if the eye is used correctly.

4. *Master Gesture.*—A fourth useful device is the "master gesture," which is a gesture that is used repeatedly until it becomes part of the character. An old man may be fumbling with his beard. A young fire-eater may constantly put his hand to his sword hilt. A nervous housewife may roll her apron. Of course, this idea must not be overused, but it is sometimes helpful.

When an actor is having difficulty with a character, the director may often solve the difficulty by giving specific aid in the use of the breath, the body as a whole, or the eye, or by suggesting a good master gesture.

Some Traditional Rules of Acting

In addition to these devices which help in the training of the individual actor, there are certain traditional rules of acting which the director should know. Each of these rules is founded on some sensible observation, and amateurs would do well to observe them, however much the professional may depart from them.[6]

1. Make turns towards the audience. The face is

[6] See Volumes I and II, on *The Art of Acting,* in the Fifth Series, Publications of the Brander Matthews Dramatic Museum, (Columbia University, New York, 1926).

usually more interesting and expressive than the back of the head. Besides, only experienced actors can successfully throw their voices behind them.

2. Stand in general with the down-stage foot (the one nearest the audience) back, and kneel on the down-stage knee. This tends to throw the face and the voice towards the audience, and as a rule makes better body lines.

3. When two or more actors enter together the speaker enters last. This allows the speaker to throw his voice forward, towards the audience, and not back, and it allows the action to be forward.

4. In general, eyes should be on the speaker. The tendency of an audience is to watch what is the center of interest for the actors, and this should be in general the speaker.

5. Stand still, unless the part demands motion or business. The longer an actor retains one position the stronger is his position in the stage picture. When George Frederick Cooke, the celebrated actor, was questioned as to the most difficult and important part of acting, he replied, "Sir, it is to learn to stand still."

6. Let the business precede the line a little. The eye is often more important than the ear.

Some General Suggestions

There are also a few suggestions that the director might keep in mind in regard to rehearsals for details.

Have groups of actors rehearse by themselves, speaking their parts aloud and studying their own movements in a mirror.

Bits of uncalled for business (cigarette, stick, fan, needlework, etc.) give the actor something to do and help in overcoming self-consciousness.

Let there be no futile or incomplete gestures, but be sure that all gestures look as though they were intended.

Don't drag out the lines.

Don't let the actors drop out of character (*i.e.*, stop acting) when the speech is finished.

Don't carry difficult scenes (love scenes, very tragic scenes, etc.) too far in general rehearsals. Rehearse them privately or in pairs, so they will be effective when first performed before the other actors.

Don't try to correct every detail at once. Many defects will drop out naturally in a well-conducted series of rehearsals.

Perhaps all these devices and all this advice may be summed up in Shakespeare's wisdom, that the end of acting is "to hold, as 'twere, the mirror up to nature." To do this properly is the chief interest in the art of acting. One of the most acute observations ever made on that art appears in Fielding's *Tom Jones*. Tom and some other persons have taken Mr. Partridge, the country schoolmaster, to see David Garrick play Hamlet. After the play they ask Mr. Partridge which of the players he liked best. He insists that the king is the best actor, and when they tell him that all critics have agreed that Hamlet was acted by the best player who ever was on the stage, he breaks out scornfully:

"He the best player!" cries Partridge, with a contemptuous sneer, "why, I could act as well as he myself. I

am sure, if I had seen a ghost, I should have looked in the same manner, and done just as he did. And then, to be sure, in that scene, as you called it, between him and his mother, where you told me he acted so fine, why, Lord help me, any man, that is, any good man, that had such a mother, would have done exactly the same. I know you are only joking with me; but indeed, madam, though I was never to a play in London, yet I have seen acting before in the country; and the king for my money; he speaks all his words distinctly, half as loud again as the other. Anybody may see he is an actor."

If the actors in our amateur groups are to draw tributes the equal of this unconscious one to Garrick, it will be by virtue of conscientious work during this third phase of the rehearsals.

D. THE FOURTH STEP: WORKING FOR FINISH

Function of the Fourth Step

But the time must at length come when work on all these details of the third phase must be given over. The director and the actors must turn their attention again to the play as a whole. Up to this point the director has been like a teacher, and the actors like pupils learning to play their instruments. Now the instruments must be played together, and the director must turn his major attention to the ensemble playing. Faulty details, if any still remain, must be overlooked or covered by the proper performance of the play as a whole. And as the conductor of an orchestra cannot stop to teach an individual musician how to play a single note at this stage of the practice, so the director

of a play must not stop to teach an actor some detail of characterization that has not yet been learned. The idea now is to produce a smooth and confident performance.

Some of the points about the performance that must be worked for in these last three or four rehearsals are as follows:

1. *Atmosphere, or the General Tone of the Play.*—Actors and director should agree on the emotional state that they wish to impress on the audience, and the director must see that the play is performed so that this is produced.

2. *Tempo, or the Speed of Playing.*—The play must not be played throughout at the same even tempo. Some places must be done more slowly and some more rapidly, in order that the proper effect be created. The director must decide on these variations in tempo. It is a general rule that the tempo of comedy is fast, and the tempo of tragedy slow.

3. *Emphasis, or Climax.*—Not all parts of a play, or of a scene, are of equal importance. To emphasize the proper places in the proper way is one of the most important purposes of the final rehearsals.

4. *Teamwork.*—The actors must learn to work with one another, and to help each other produce the desired effects. Those with less prominent parts must play them properly for the good of the play and not to show their ability. And above all they must be made to realize the importance of playing the play as it has been rehearsed, for the sake of the play and their fellow actors. In one performance of Goodman's "The Game

of Chess," the boy playing Boris, the peasant who is having an interview with the Czar, was so carried away by his part that he locked the door and dropped the key into his boot. He was supposed merely to look out to see that no one was listening to the interview, and this is what he had always done in rehearsal. Of course, there was no way to get the key to unlock the door again! Hence, after the death of Boris, the footman was obliged to enter through the door that had been so obviously locked! The effect was unfortunate, even though the audience might have thought that this was but another trick of the wily Czar. One of the banes of amateur performances, especially in the school and college, is the actor who is "inspired" by the performance to change his method of playing or to add to his part. "Gaging," swelling the part with one's own invention, is the ancient professional name for this vice. It should be guarded against in the final rehearsals.

Method during Fourth Step

Probably the best and most common method of conducting the rehearsals during this last phase is to play the scene or the act through without pauses or breaks, while the director makes notes on parts that need changes or corrections, so that those parts may then be repeated. Or the director, like the conductor of an orchestra, may produce changes in the play without interrupting the playing by directing it in a quiet voice. He may say, "Faster, faster, that's it," or "Hold that pause, now; don't change your position yet," or

"Now, emphasize this next speech," or "Look in this direction, all of you," and so on. The main consideration is that the actors must be given confidence in themselves, they must be allowed to have practice in playing the play through. These final rehearsals should not be interrupted for work on details that the coach has been unable to teach in the preceding rehearsals. The time for details has gone by, and it is probable that what hasn't been accomplished in previous rehearsals can't be done now at the last minute anyway. Every good director will see details that might be improved, but the wise one will neglect these things at the end for the sake of "pulling the play together." The effect of a play on an audience is largely the effect of the whole.

Some Suggestions

There are a few general suggestions:

Speed must be indicated, not by a more rapid delivery, but by a picking up of cues more quickly, even before the last speaker has quite finished.

Actors should be warned about laughter and applause, and they should have practiced in holding the scene until interruptions are over. Inexperienced actors are liable to continue their lines against the noise of the audience so that often many of the lines are lost.

Curtain calls should be rehearsed, if any are to be allowed. It is sometimes customary to have one call, taken in the tableau of the last line.

Eliminate the sounds of footsteps on the stage by proper shoes. Noises that do not seem noticeable in

rehearsals, where the director is constantly interrupting, are very loud in the silence of an attentive audience.

And lastly, and above all else, don't stop these final rehearsals to work on details that have been left unlearned from all the previous rehearsals. Work for a continuous and confident performance.

The Dress Rehearsal

The final rehearsal should be a dress rehearsal, complete in every possible detail. Some directors like to have an invited audience, in order to give the actors the "feel" of playing before people. In any case, actors must be made to understand that they are playing to an audience, in spite of the fact that they must not appear to be. To teach actors to "ignore the audience" is doubtful wisdom. They must rather be taught how to hold their positions and lines through any interruptions of laughter and applause, although they must appear to conduct themselves as though they were alone. The dress rehearsal should be a rehearsal for the scene shifters, electricians, and the other members of the producing force, as well as for the actors.

There is an old tradition that "a bad dress rehearsal makes a good performance." This is a most untrue and dangerous doctrine. It is probably true that amateurs often rise to the occasion of a performance, so that the performance is usually not as bad as a poor dress rehearsal. But nothing is more helpful for a good performance than a successful dress rehearsal.

CHAPTER VI

ON PRODUCING WITH A THEATER

Definition of Theater

The word "theater" comes from an old Greek word meaning "to see" or "to view," so that originally a theater was merely a place for the display of a spectacle. In modern usage, however, theater has come to mean a building that has two main parts: (1) an auditorium for the accommodation of an audience, and (2) a stage on which the play may be performed. These two parts of the building are separated by a wall, in which there is an opening through which the audience hear and see the performance. This opening is called the "proscenium" opening, and it may be closed at will by a curtain.

A. ON HAVING A THEATER

Test for a Theater

When a theater is available, the giving of plays in the traditional way is a much simpler matter. Sometimes, however, the theater is not a very good theater. The question arises then as to what constitutes a good theater. The following questions may aid in arriving at an answer:

1. *Are its acoustic properties good?* Can the actors make themselves heard in all parts of the auditorium

without undue efforts? Or must they strain and bellow to no effect?

2. *How about the "sight lines"?* Sight lines are the lines of vision, and they may be represented on the floor plan of a theater by two lines from each seat, one to each side of the proscenium arch. In the perfect

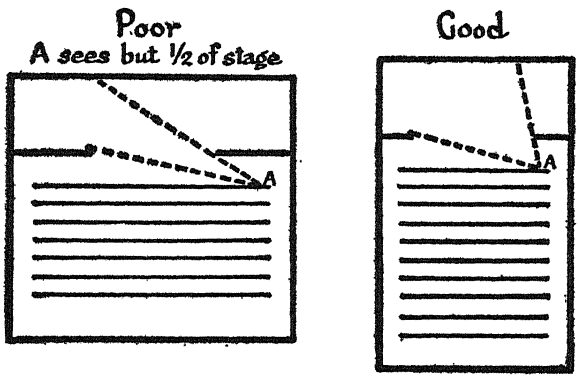


FIG. 3.—SIGHT LINES.

theater, the sight lines from each and every seat should cover the entire stage. That is, every person in the audience should be able to see all the action, regardless of the part of the stage in which it is taking place.

3. *What are the mechanical possibilities of the stage?* Is the stage sufficiently large so that there will be room on all sides of the scenery? Is it high enough to allow the scenery to be pulled up out of the way? Has it storage room for properties and scenery? Has it modern appliances?

4. *Does it make a pleasing æsthetic appeal?* Is it painted and decorated so as to be attractive? Is the

auditorium the sort of room in which the audience will be in a frame of mind to enjoy a play? Is the lighting soft and pleasing, or harsh and glaring? Are the seats comfortable?

5. *Are the hygienic conditions proper?* Are there washrooms and sanitary facilities? Is the room successfully ventilated? Is it correctly heated?

Improving a theater

It is a fortunate—and a rare—Little Theater, or school and college group, that has a theater about which all these questions can be answered in the affirmative. Where some detail is unsatisfactory, plans should be studied to correct it. The acoustic properties of an auditorium can sometimes be improved. Where expert advice cannot be secured, experimentation must be resorted to. The cause of the difficulty is usually that the sound waves do not die out quickly enough, because they are reflected back and forth by blank walls. The breaking up of any large expanses of blank wall, especially if they are opposite one another, usually corrects the difficulty. Curtains may be hung or the walls may be covered with some material that will deaden reflection. "Hair felt" is the material that has the greatest effect.[1]

In theaters where the acoustics are bad, the actors must pay greater attention to their enunciation and the placing of their voices, to make this defect less serious. Proper direction of a play may help to overcome the

[1] See W. C. Sabine, *Collected Papers on Acoustics* (Harvard University Press, Cambridge, 1922).

defect of bad sight lines, too. The action can usually be brought forward and to the center of the stage, so that it will be visible from all parts of the house. The stage designers can make scenery that will aid the bringing of the action into general vision. And sometimes it is worth while to remove a few bad seats, or to replace them so that the sight lines are improved. To build up the best possible mechanical equipment should be the aim of every group. Much can be done, even where the back stage space is not all that could be desired. The æsthetic appeal can be made satisfactory by redecorating; and care and foresight will do much to improve hygienic conditions. No group of progressive amateurs who are fortunate enough to have a theater at their command should ever be satisfied until they have done everything in their power to make it as near perfect as possible. True play production demands the best equipment that can be devised.

B. ON BUILDING A THEATER

Any large room, whether it has a platform or not, may be turned into a theater. If it has a platform of proper size the process is much easier, but a platform can be built if necessary. To try to turn a room into a theater by building merely a proscenium arch and curtain, without any device to raise the action from the floor, is usually very unsatisfactory. If there is no platform, and if one cannot be built, it is wiser to use central staging, or some similar device. (See pages 86 *ff.*)

Size of Room

The first and most important consideration is the size and height of the room. A stage that is smaller than fifteen by twenty feet is too small for much use, and a larger one is better. The stage itself should not take up more than one-third of the room, or else there will be no space for the audience. Therefore, probably it will be unwise to attempt to turn any room less than twenty by fifty feet in size into a theater. Some ingenious things have been done by organizations with smaller rooms, but to do much is difficult. A larger room is more desirable. Height is another important consideration. A stage should be raised three feet from the floor, if the floor of the auditorium is level, or else the actors cannot be seen sufficiently well from any but the first two or three rows. If the auditorium is large, four feet, or even four feet six inches, is a better elevation for the stage. The proscenium-arch opening should be at least nine feet in height, otherwise the actors look cramped and out of proportion. Twelve feet, or more, is a still better height for the proscenium arch. There should be a space of at least four or five feet above the proscenium arch. In a really well proportioned theater, there is as much room above the top of the arch as there is below; that is, the top of the proscenium arch should be half way between the floor of the stage and the ceiling, so that it is possible to haul scenery up against the ceiling and out of sight. Probably few rooms are high enough to allow this to be done, and it is not absolutely essen-

tial, as the scenery can be handled in some other way. But allowing three feet for the height of the stage, nine for the proscenium arch, and five for the space above the opening, it may be seen that the room to be turned into a theater should be at least seventeen feet in height. If this height is not available, the space above the opening had better be reduced, rather than any other dimension. The minimum size of the room that can be successfully turned into a theater should be, then, about twenty feet by fifty, by seventeen in height.

Permanent Stage and Proscenium

If the room can be turned into a permanent theater, the problem of building a platform and proscenium arch is not difficult. The undertaking then assumes the form of building a wall to cut the room into two parts, the smaller of which will contain the stage, and the larger be the auditorium. In this wall will be left the large opening called the proscenium arch. The stage must be solidly built, and should be floored with soft wood, so that stage braces may be screwed to the floor with stage screws. A hardwood floor is undesirable for any stage. The proscenium wall may be built of beams, and covered with beaver board or some similar substance. It is still better to have it plastered, or finished in the same way as the auditorium itself. The color should be subdued and harmonious, and if it is desired to outline the proscenium arch in some way, a plain dull black, or a dark finish of some sort, is much more suitable and artistic than the gilt, ornate effect so often found in public theaters. The prosce-

nium arch is merely a medium through which the play is to be seen, and it should not attract attention to itself. It should be an inconspicuous frame for the action. Persons wishing to turn a large room into a permanent theater will find a wealth of suggestion and aid in Irving Pichel's admirable volume, *Modern Theaters.*[2]

More often, perhaps, especially in schools and colleges, the problem is to turn a room into a theater only temporarily. Here, the stage and the proscenium wall must be movable. It must be possible by a few hours of work to transform the room into a theater. Of late, several theatrical dealers have begun to make little theater equipments which can be thus set up and taken down, but there is no reason why an energetic dramatic organization cannot make its own.

Movable Stage

The stage is the most difficult thing to build, for it must be made solid. No general plan that will be universally satisfactory can be devised. A series of strongly built sections, each of which has permanent legs like a table, which can be fastened together, is perhaps the easiest sort of stage to manufacture. It requires considerable storage room, however, so that it will usually be necessary to make a stage that can be stored in less space. The illustration on page 67 and the explanation of it should suggest a possibility. A good grade of lumber should be used, if possible, otherwise the warping of the stage makes it difficult to put up

[2] Irving Pichel, *Modern Theaters,* (Harcourt, Brace & Co., New York, 1925).

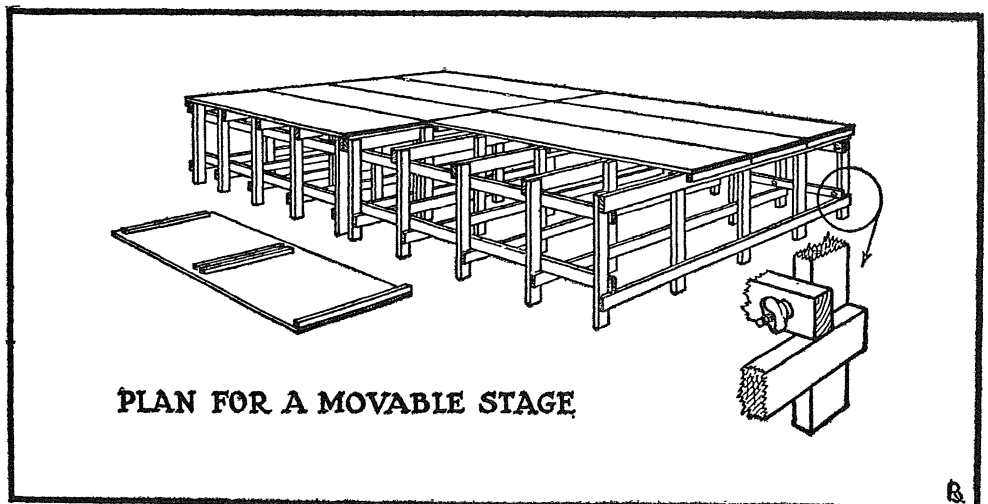


FIG. 4.—Sections of flooring are nailed to cleats and supported by a framework of two-by-four beams. The section of the framework shown at the right, consisting of five uprights and two long beams parallel to the floor, may be nailed permanently. The long beams running the other way are to be fastened to the uprights with bolts and winged nuts (as shown in the detail). The uprights may be braced in other places in the same manner. They should, probably, not be more than eighteen inches apart. As many sections can be made and fastened together as are necessary to make a stage of the desired size.

and take down easily. The short crossbeams supporting the planks of the floor of the stage should be near enough together to hold them absolutely rigid—fourteen or eighteen inches apart, at the very most. The cross braces may be fastened to the short upright beams that hold the sections with bolts and winged nuts, and the sections may be fastened to the frame and to each other in the same manner. A stage that is built in this way will hold almost any weight, and it may be put up and taken down without the use of a tool. If a movable stage is to be built, it pays to put as much money and labor into it as is necessary to make it absolutely tight, for good play production is impossible on a shaky, unsatisfactory platform.

Movable Proscenium Wall

For the proscenium wall there are two possibilities. The wall may be made of covered frames, or of draperies.

1. *To build a temporary proscenium of frames.*—A temporary wall of frames should cut off the stage end of the room, by extending from wall to wall, and from floor to ceiling. In its simplest form it would consist of three pieces, two tall frames (A) standing on the floor, and a crosspiece (B) reaching from the inner edges of these frames, and placed up against the ceiling. An arrangement of this sort, however, needs to be supported by the side walls of the room, or by the platform, or in some other way. Often it is not permissible to attach things to the walls or the ceiling. In that case, it is possible to devise a proscenium wall

that will support itself. Two pieces must be used at each side, laced or hinged together so that they may be placed at an angle to one another. The crosspiece, which forms the top of the proscenium, may be fastened to the inner edge of the uprights. The curtain,

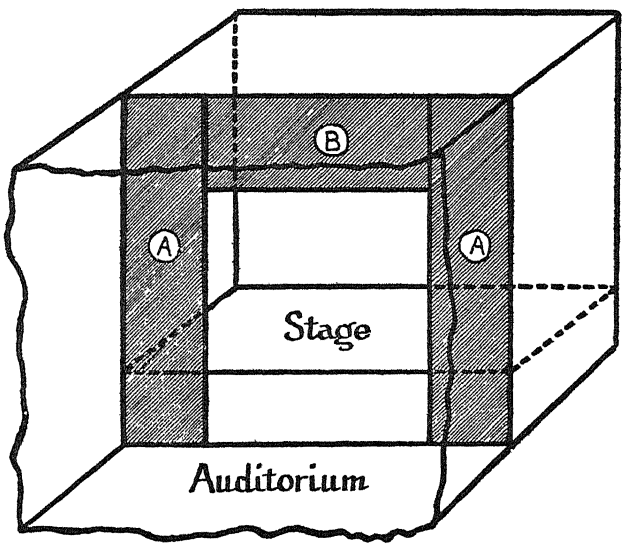


FIG. 5.—PROSCENIUM WALL, CUTTING OFF THE STAGE FROM THE AUDITORIUM.

too, may be attached to these uprights, and thus the entire proscenium merely stands on the floor, like a huge screen.

The frames may be made exactly like ordinary scenery, the process being described on pages 123 *seq.* They may be covered with some sort of building board, or with canvas or other cloth. They may be painted

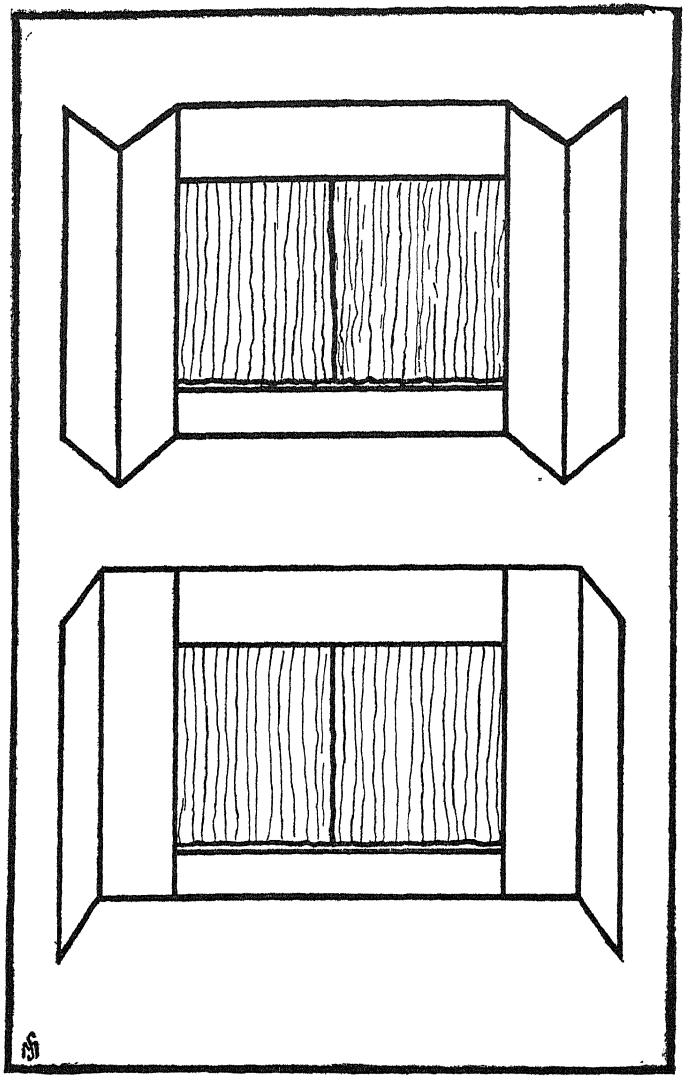


FIG. 6.—A PROSCENIUM OF FRAMES.

attractively, just as any scenery would be painted; or they may be colored to approximate the walls of the room in which they are to be used. This arrangement may be put up in a few hours, and often taken down in a few minutes. Stuart Walker's Portmanteau Theater was nothing more nor less than a series of frames of this sort, which he was able to set up in a ballroom, or a hall, or on the stage of an ordinary theater. An interesting account of his device will be found in the Introduction to *Portmanteau Plays,* by Stuart Walker.[3]

2. *A Temporary Proscenium of Draperies.*—If storage space is at a great premium, a temporary proscenium of draperies is sometimes an advantage, for it can be rolled and stored in a very small space. It consists of three pieces, two long ones to fill the space from the ceiling to the floor on each side of the opening, and a short one to make the top of the proscenium opening. These draperies are exactly like that form of window curtain known as Dutch, the short top curtain forming the valance.

The material used will depend upon taste and the amount of money available. It may range from velvet or velour to denim or cotton poplin. Monks' cloth is a very beautiful material, but if lights are used behind it, it needs to be lined. In fact, a lining of some sort may be necessary whatever material is used, in order to make the proscenium absolutely opaque. Outing flannel is a substitute for velvet that is often used on

[3] Stuart Walker, *Portmanteau Plays* (D. Appleton & Co., New York, 1917).

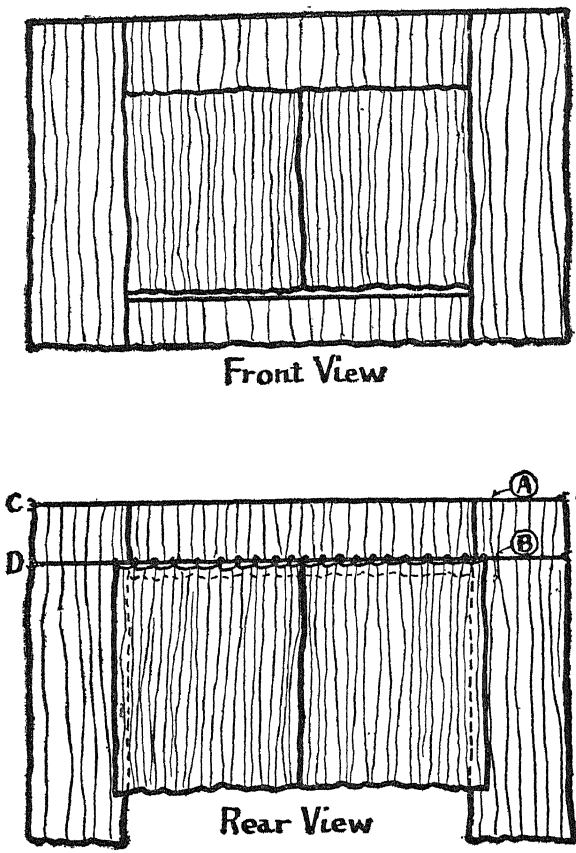


FIG. 7.—A PROSCENIUM OF DRAPERIES.

the professional stage, and it makes excellent curtains.

The curtains had better be supported by a heavy wire (A), stretched from wall to wall, up against the ceiling. It may be fastened at each end to hooks (C, C) in the walls or in the ceiling. A turnbuckle, which can be secured in almost any hardware store, may be used at either or both ends of the wire, to keep it taut. The curtains may be hung on rings, or may

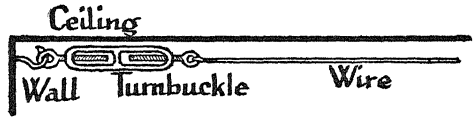


FIG. 8.—METHOD OF TIGHTENING WIRE WITH TURNBUCKLE.

have a hem through which the wire runs. It had better be weighted at the bottom, or in some way fastened down so that it will not swing at any gust of wind. The customary way of putting a weight in a curtain is to run a chain inside the bottom hem. The chain may be of any size, but had better be covered with canvas first, so that it will not so easily wear through the curtain. A curtain weighted with a chain may be easily arranged in artistic folds. The curtains may be plaited, and fastened to a batten, if preferred.

A second wire (B), placed an inch or two behind the proscenium curtains, and six or seven inches above the bottom of the top curtain makes the best support for the opening curtain. It, too, may be made rigid by the use of turnbuckles. The entire proscenium will thus hang from two wires (A, B) which depend on four firmly fastened hooks (C, C, D, D). The hooks may

be made inconspicuous, and can usually be left permanently in position, so that to put up the proscenium it is necessary only to slip the ends of the wires over the hooks, tighten them by the turnbuckles, and shake out the curtains.

The Curtain

Whichever form of temporary proscenium is used, the making and hanging of the opening curtain will be an identical process. In fact, the operation will be the same for a permanent proscenium, in most cases. A double curtain opening in the center is probably most satisfactory; for a drop, or guillotine, curtain is difficult to arrange unless the overhead space is sufficient so that it may be hauled straight up. If there is sufficient overhead room, a drop curtain may be arranged to run by pulleys and ropes, just as any other drop is (see page 145). Sliding curtains may be run on a track-and-pulley system, which will be supplied by any dealer in theatrical materials. For any but a very heavy curtain, however, it is possible to rig up a satisfactory arrangement in the following manner:

Run a heavy wire from wall to wall, or from support to support, in the manner described above, for the proscenium curtains. It may be tightened with turnbuckles; and if it has a tendency to sag, it may be supported by a wire hanging from the ceiling in the exact center. The curtain may be run on this wire on sliding rings or small pulleys. On one small stage, the deed was done with little wooden spools. The rings or pulleys should be placed on the curtains so that they

come about six or eight inches apart; therefore the number required depends entirely on the width of the opening. The rings had better be put in place on the wire, and then the curtain fastened to the rings by sewing or with curtain pins, so that it falls into the desired folds or plaits. Now it is necessary to tie the rings together at the proper distance, with a light, but strong, cord. This cord (M) goes from ring to ring, or from pulley to pulley. It prevents the rings from

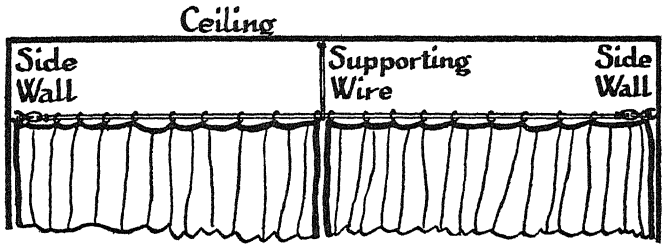


FIG. 9.—METHOD OF HANGING THE CURTAIN.

moving apart when the curtain is pulled by one corner, which would otherwise straighten out the folds. When the rings in the corners of the curtain (A and B) are pulled forward or back, the curtains will follow, and they will remain in folds, as arranged.

It is necessary to devise a rope for opening and closing the curtains. To do this, a single pulley is necessary at one side, say the left, and a double pulley at the right. The curtains will be worked from the side where the double pulley is placed. The curtains must be tightly closed, just as they should be when in position, and a light, strong rope tied to the corner of one

(A), run through the single pulley, and brought back and fastened to the corner of the other (B). It is very important that this rope be tight, and that it be just twice as long as the distance from where the curtains meet to the pulley. Then a rope must be run through one sheaf of the double pulley and fastened at the corner of a curtain (A); and the other end of the rope run through the other sheaf and fastened at the

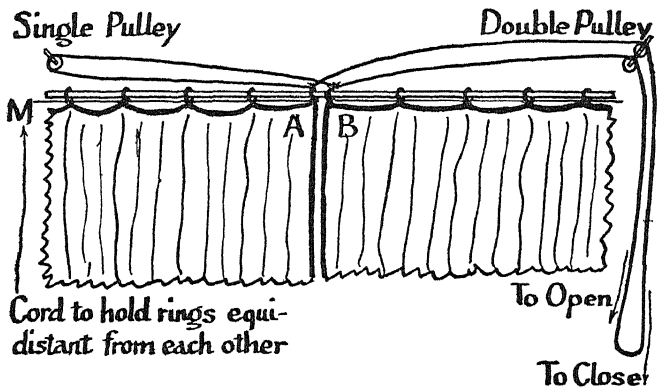


FIG. 10.—METHOD OF PULLING THE CURTAIN.

other corner (B). When the rope fastened to the near curtain (B) is pulled, the curtains will open evenly and equally; and when the rope fastened to the other corner (A) is pulled they will both close. The principle of this operation is exactly the same as that used when two portières are made to open and close by the pulling of a single cord, and probably any upholsterer or decorator will explain it to any one who finds it difficult to follow the printed directions. Nevertheless, whether

or not the principle is understood, the curtains will work if the directions are carefully followed.

The one difficulty with curtains so rigged is that they sometimes leave a small gap where they meet in the center. To overcome this difficulty, two devices are possible. Two parallel wires may be run, one for each curtain, so that they can slide by one another. Simpler yet, the first ring on one curtain may be set

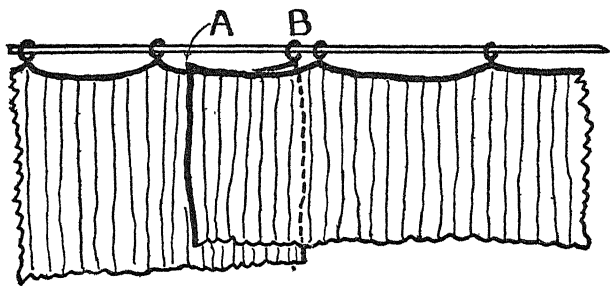


FIG. 11.—DETAIL TO SHOW OVERLAPPING OF CURTAINS.

back six or eight inches, so that this curtain overlaps the other by that amount. In that case, the ropes for working the curtains must be tied to the corner (A), and not to the first ring. The other ends should be tied to the first ring on the other curtain (B), just as usual.

Under whichever of these conditions amateurs are obliged to work, whether they have a real theater, or make one for themselves, they should not be satisfied until they have secured the best producing equipment possible under the circumstances. Sometimes amateur groups seem quite proud of their insignificant equip-

ments, and glory in telling what they have done by ingenuity with their meager means. Much more worthy of admiration would be their attempt to build up a better equipment. There is little danger of true ingenuity being stifled by adequate equipment. Quite the reverse is true: adequate equipment frees ingenuity to study the plays presented, so that they may be given in the best possible way and with the utmost beauty and effectiveness—and this is the only true end of dramatic art.

CHAPTER VII

ON PRODUCING WITHOUT A THEATER

Play production by no means depends upon a "theater" in the modern sense. In fact, this theater is a late development in the world of drama. It was universally used only after 1650, or so. Most plays antedating this were written for a stage without a proscenium arch. They are well adapted, therefore, to be played without a theater in the modern sense. The plays of the Greeks and Romans, and those of the Elizabethans, are in this classification; so perhaps the greatest drama that has yet been created was created for production without a theater. It may be surmised then that producing without a theater is a fascinating process, in which there is room for all possible inventiveness.

A. USING A PLATFORM WITHOUT A CURTAIN

Where a platform is available, even though there is no proscenium arch and no curtain, the problem is not altogether unlike that of performing in the usual theater. The fact that it is impossible to hide the platform from the vision of the audience makes it necessary to find some other device for the changing of scenery, or for the disclosing and the hiding of characters who

might normally be found on the stage as the curtains are opened or as they are closed. There are a number of possibilities.

Using a Single Scene

In the first place, it is possible to choose a play that can be played without a change of scene of any sort. The platform can be prepared for the play before the audience enters, and no attempt need be made to hide the scene at any time. The method used by Rinehardt in "The Miracle" as produced at the Century Theater, New York City, may be aimed at. In that noteworthy performance, the entire theater was transformed into a cathedral. As one entered, he saw its Gothic arches and pillars, and its altar surrounded by a huge grill. Occasionally monks, or church attendants, crossed in front of the altar. Finally an old verger tottered out and lighted the candles. The music of the organ commenced. The characters began to enter and the play started. The time that the audience had waited in the auditorium had enabled them to orient themselves in the proper atmosphere much better than would have been possible had the medieval cathedral suddenly been disclosed by the opening of the curtain.

A play of this sort must be directed so that the characters move off the stage naturally at the end of scenes, which can never be "cut off" by the curtain. The stopping of the action in an exciting situation by the curtain is, at its best, an unnatural theatrical convention, anyway; so that perhaps the inability to do this is not a very great handicap. The Elizabethan drama-

tists were not able to do so, therefore their plays are especially suitable for a curtainless platform. The platform can be arranged to approximate an Elizabethan stage. Chinese plays may be made very interesting played in this manner. In fact, almost any play, even a modern realistic one, may be played successfully on a curtainless platform if it is directed with that sort of performance in mind, and if sufficient ingenuity is spent in adapting the platform.

"Curtain" Substitutes

It is possible, indeed, to perform plays that demand "curtain" situations. Darkness may be used instead of a curtain. When the play is ready to begin, a bell or some signal may be sounded, the lights may be turned off for a few seconds during which the characters enter and take their positions on the stage. The lights may then be turned up, and the play begins with the characters on the stage. The same device may be used at the end. With the "curtain line," the lights may be turned out, the characters disappear, and when the lights come on again the empty stage announces intermission or the end of the play. There is no need to do even this, however. It is surprising how soon an audience accepts any convention. At the end of a scene, however dramatic the ending, the actors may hold the position for a moment, and then very frankly and obviously drop out of character and walk off. Of course, these devices are more adapted to student performances before fellow students, than to public performances, for which it is better to adapt a play to the

curtainless situation by using a suitable one-scene piece, as suggested above.

"Dramatic Scene-shifting"

Sometimes, however, even for public performances, it is amusing to change the scenes openly, somewhat as may have been done in the Elizabethan theater. This may be called "dramatic scene-shifting." That is, the sceneshifters are in character, too, as well as the actors of the play. In a Shakespearean play, Elizabethan pages may do the work; in a Molière play, seventeenth century French servants. Sometimes lines may be invented for a head sceneshifter of some sort. An example will illustrate this possibility. In a performance of MacKaye's "A Thousand Years Ago," done without a front curtain, the scenes were set by a force of half a dozen Chinese coolies, under the direction of a Chinese Property Man. All the sceneshifters were in costume and make-up. The performance was given in front of a beautiful gray cyclorama, and the scenes were changed by the moving of several small platforms, the use of brilliant Chinese screens and vases, the necessary furniture, and above all by the changing of the lights. The audience, on coming into the auditorium, saw at one end only the great gray cyclorama, or curtain, which hung straight down with a hidden slit in the center. When the play was about to start a gong was sounded, the lights went out, and a spotlight played on the center of the curtain. The Property Man bounded through, and with outspread arms called for silence. Then he spoke:

Sh-h-h! Silence, lords and ladies, if you please,
That you may hear our play with greater ease.
And, friends, I beg you, do not take it ill
I called you "lords and ladies"; if you will
You may be clowns, or peasants, or—let's say—
You're—palace walls! only you're *in our play!*
For you must aid by every subtle means
Imagination knows to change the scenes.
With *my* assistance, if you truly try,
You'll find your parts are easy. Who am I?
See, lady, below the other names, there! see!
The Master of the Properties, that's me.
And though I'm at the bottom of the page,
My part's important, for I set the stage.
And then—I guess I might as well confess—
That I'm the Prologue—that is, more or less.
I come to take you with me far away
From all this modern world to old Cathay,
For that's the place we're going to have our play.

(*Takes scroll from belt, unrolls it, and looks for directions.*)

"Outside of Pekin Gate, the city wall. . . ."

(*Looks around for something to serve as wall.*)

This curtain here will do, but strong and tall
You must imagine it, as with a frown
Its crenelled towers watch o'er the sleeping town;
For here there dwells in power, and pomp, and state,
The Emperor of China. (*Consults scroll.*) Now, "a gate."

(*With aid of other property men, he loops up curtains, making an opening for the gate.*)

There, that will do, I think. Lastly, "a row
Of severed heads!"

(*Property men raise "severed heads" above the top of curtain.*)

(*Shuddering pleasantly*) Like evil plants they grow!

But, friends, I pray you, do not yield to fear,
Our play's a pleasant one, and full of cheer.
(*Consults scroll again.*)
"Sunrise." A little light, a little light.
(*Claps hands, and lights come up.*)
The city now awakens from the night.
(*Looks through gate, and whispers confidentially to audience.*)
And all is stir and bustle there within;
I think our play is ready to begin.
Far down this road people I see appear.
Silence, now, not a noise! just hark and hear!
(*Takes seat with other property men in front of audience.*)

Act I was then played, before the created city walls, and at the end of the action, after all the characters of the play had disappeared, the Property Man bounded up from where he had been sitting, and consulted his scroll of directions again.

"A Harem." Here's where Turandot does dwell,
Like all true Princesses, as you know well!
(*Music while the Property Man and his assistants set the scene for the Harem. When all is ready, he claps his hands, the music stops, the lights change, and he looks around to see that everything is in place.*)
All's ready, now. Here's everything we need.
Quiet, sh-h-h! quiet! Let the play proceed.

The Property Man returned to his place in front of the audience, and Scene I of Act II was played. At its end, he again came forward and addressed the audience:

You like it, eh? I thing it's pretty fair.
(*Turns to assistants.*)
Come, hurry now, let's the next scene prepare.
(*Music, while the scene is set for the Throne Room. Then Property Man gives signal for cessation of music, and consults scroll to be certain there is no mistake.*)
Here, for the Emperor, a royal throne;
This, for Altoun; this, Turandot alone;
(*Turning to audience.*)
For now, my friends, you're in a noble hall
Within the splendid palace. Here befall
Strange things, so listen closely, listen all!

There was a similar process before each scene; and the parts of the sceneshifters were concluded, after the final scene had been set, by the following lines:

Again we need the thrones, "the Hall of State,"
Where rules our Capocomico, the Great.
(*Property men set the scene as before.*)
There! Now our task is done! And, by the way,
This is the last you'll see of us to-day;
So, if you like the way we've done our task,
You—well (*with mock hesitation*), you know, it's hardly correct to ask,
But (*shows empty pockets*), it's a struggle, and if you'll —do—so (*indicating applause*)
The Manager might (*pantomime of paying money*)—well, you know, you know!
(*Bows, and exits, followed by the other property men.*)

A device of this sort is exceedingly interesting and amusing, and can easily be adapted for almost any sort

of a romantic play. One point to be noted is that it must not be allowed to become so long or elaborate that it steals interest away from the play itself. The use of the Chronicler in Drinkwater's "Abraham Lincoln," and the Ballad Man in MacKaye's "Washington," is essentially nothing more nor less than "dramatic scene-shifting."

B. CENTRAL STAGING

Another possibility for producing plays without a theater lies in the use of central staging. This, too, is a tried and true device of great antiquity. The playing of little scenes in the medieval church with the congregation on every hand, the acting out of the lesson in the kindergarten in the midst of the class, the Elizabethan stage surrounded on three, and sometimes on four, sides by the audience, the experiments of Max Rinehardt in Das Grosse Schauspielhaus in Berlin—all these are essentially examples of central staging. A large room or a hall is the main requirement. Even dramatic organizations having a fully equipped theater will find that central staging offers great opportunities for unusual effects, if a good sized hall can sometimes be used in place of the theater. Often it will solve the problem of organizations which find themselves temporarily theaterless.

Method

In central staging, the play is performed in the middle of the hall, while the audience is placed in a circle on all sides of the performers. Several rings of chairs

may be placed around the outside of the hall, leaving the center clear as the playing space. If more than two or three rows of spectators must be accommodated, it becomes difficult to see the action unless it is raised; and in any case, a small platform in the center to raise the important action is helpful, although it is not absolutely necessary. This platform, and the space around it, and all the aisles leading through the spectators to the space, may be used for playing. If this central space can be lighted by overhead lights, or by spots and floods from concealed sources, many interesting effects can be secured. The proximity of the actors to the audience gives a feeling quite different from the "picture-frame" stage, and for some plays is unusually effective.

Examples of Central Staging

"Prunella," by Laurence Housman, was done in this manner with success. A small raised platform in the center was made into a garden, with a sundial, a stone bench, and a bed of tulips. Entrances into the garden, which is the scene of the entire play, were always made either from a house, or through a gate which is supposed to lead to a passing road. A broad aisle through the spectators led to a house at one end of the hall, with a door through which characters entered, and a window. At the opposite end of the aisle, at the other side of the hall, was an iron gate, making a second entrance. Characters who are supposed to be in the house when the play starts enter the playing space through the door of the house, and the others come through the

gate. The story is of a band of strolling mummers led by Pierrot, who wander into the garden. He falls in love with Prunella, who lives in the house with her three aunts, and he runs away with her. Of course, he and his followers enter from the road; Prunella and her aunts come from the house. When Prunella elopes with Pierrot, she climbs through the window, and they run out by the gate. The entire action works out very

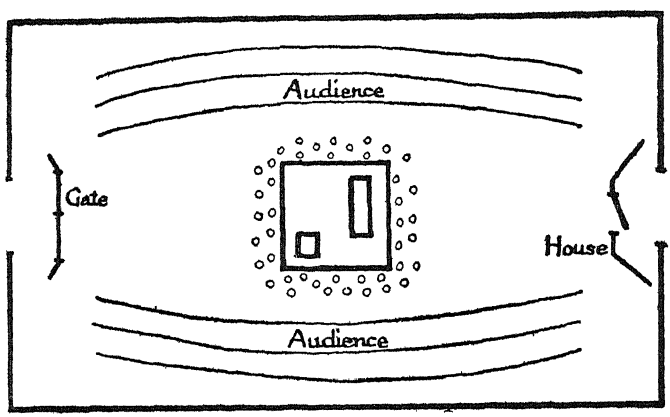


FIG. 12.—"PRUNELLA"—CENTRAL STAGING.

clearly and well. The playing was on the small platform, in the space around it, and up and down the aisle. By having several aisles, with a set piece of scenery, or something to make a distinctive entrance, at each end of every aisle, it is possible to have as many entrances as any play demands.

Molière's amusing farce, "The Doctor by Compulsion," is another example of a play successfully done with central staging. This time the attempt was made

to turn the entire hall into a seventeenth-century room. Canvases, brilliantly painted to represent tapestries, were hung around the walls. A huge chandelier of silver ribbons hung over the small platform in the center of the hall. The platform was small, about six feet square and eighteen inches high, with a single step all around it, so that it could be easily mounted from any side. The only furniture on the platform was a small

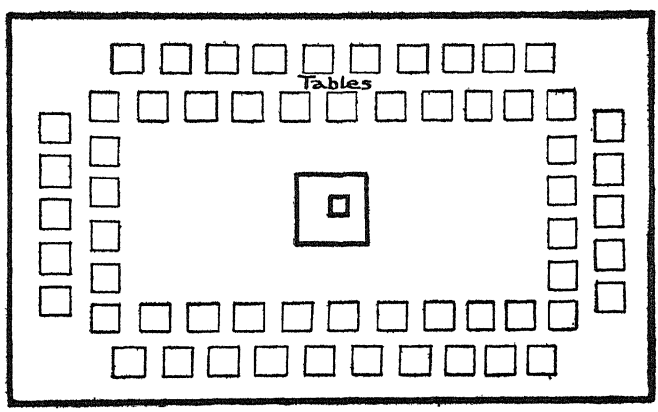


FIG. 13.—"THE DOCTOR BY COMPULSION"—CENTRAL STAGING.

square box, covered with the same colored canvas as the platform itself. The audience sat at tables, placed in rows around the playing space, and refreshments were served during the two intermissions in the performance. The action in "The Doctor by Compulsion" takes place in several different places: a hut, a place in the forest, a boudoir, a saloon. No attempt was made to change the scene in any way. The play was written, as a matter of fact, to be played without

any scenery in the modern sense; the place of the action is very unimportant, and the audience learns from the lines of the play where that place is, in practically every instance. After the audience had been quieted by the ringing of chimes, the turning out of the lights in the hall, and the lighting up of the central space by a number of concealed spotlights, the play opened with the entrance of Sganarelle, a woodcutter, and his wife Martine, from the audience at one end of the hall. They are quarreling loudly. Still quarreling, they advance into the center and upon the platform, where Sganarelle seizes a slapstick and beats his wife. From the other end of the hall a neighbor, M. Robert, rushes in and attempts to separate them. Both turn upon him fiercely, and he is driven out in discomfort. Sganarelle then attempts to pacify his wife, who pretends to be reconciled to him. Promising to cut a large supply of wood he goes out as he entered, through the audience. Two gentlemen are heard talking, and they move slowly into the lighted space discussing the trouble they are having in finding the famous physician for whom their master has sent them. Martine has been sitting on the platform meditating revenge. The gentlemen finally see her, and approach. Seeing her opportunity, she tells them that Sganarelle is a marvelous physician, but that he is queer and doesn't like to admit his skill. The gentlemen can make him admit that he is a physician by beating him. Sganarelle is heard singing and he staggers in with his bottle. Martine runs out in the opposite direction, and the two gentlemen wait for Sganarelle and try to persuade him that he is a noted

physician. And so the play proceeds. Again, the play lends itself very well to the idea of central staging.

The Technique

The technique of successful central staging is somewhat different from that of playing against a wall with the audience entirely on one side. The play must be rehearsed so that the action turns first in one direction, and then in another. The movement must be worked out with unusual care, so that the backs of all the actors are never at any one time turned in the same

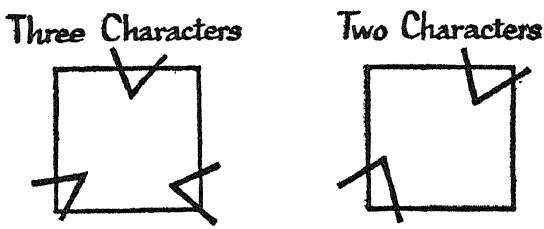


FIG. 14.—DIAGRAM OF CORRECT FACING IN CENTRAL STAGING.

direction. The rule should be that every spectator should be enabled to see the face of at least one actor at any time. Thus, if three persons are talking, they should stand in a triangle, each with his face to the center. Two persons must face in opposite directions, and never be left standing side by side, and facing the same wall. If the director, in directing a play for central staging, constantly changes his position, he will have little difficulty in working out tableaux that will be interesting from all angles. In central staging, as there is little scenery, a play that allows brilliant and

interesting costuming is better than one for which costumes are dull. The costumes may be made to give the tone to the play. Make-up must be unusually correct and careful, owing to the fact that the actors come so near to the spectators. A good lighting system, that allows the lighting of the central playing space to be varied, aids greatly, too. And if large groups are used, they must be kept out of the central space as far as possible, or they obscure the action of the important characters. If, for example, a troupe of soldiers were to be introduced in some play centrally staged, it would be wise to keep them back against the setting at the end of an aisle, while their officer, or one or two men only, advanced into the center to arrest an important character.

Groups desiring a novel form of play production, with great possibilities and opportunities for experimentation, can do no better than to try central staging.

CHAPTER VIII

THE THEORY OF STAGE DESIGN

Modern Conception of a Play

The modern conception of a play is that it is the sum total of a number of impressions made on the spectators. A play is not merely an intellectual conception of an incident gathered from the movements and the words of the actors. It is not a series of pleasing, or of moving, sounds, made upon the ears. It is not a sense of form and color to the eyes. But a play is an emotional reaction to all of these things, and to other things that are too subtle to be analyzed out of the total situation. Play production, therefore, is an attempt to translate a conception, an artistic vision, into a medium that will affect another person, the spectator, in the same way that the artist has been affected. This is the only conception that makes dramatic art a true art.

New Conception of Setting Plays

The element most changed by this new conception is stage design. There is a new attitude towards scenery, costume, and lighting. The time was, not so long ago, that the dramatic producer sent to the storehouse for a "parlor," or a "kitchen," or a "wood set," or for whatever else was demanded by the author in the play. The costumes, if nothing that seemed suitable

was in the costume-room of the theater, were hired from the costumer who gave the best "bid." The lighting was largely a matter of luck, and of the caprice of the mechanic who happened to be the electrician or the gasman. But of late, even in the commercial theater, all this has changed. A production is conceived of as a great artistic design, the work of a group of artists laboring understandingly together. The first of these artists is the author, who conceives the play. The others are those who produce it for him, under the leadership of the director. Amateurs who do not have this idea, and who do not strive for this unity lose much of the possible pleasure that lies in the practice of dramatic art.

General Principles of Stage Design

The term "stage design" is usually applied to the visual element of the great total design—that is, the scenery, which includes the lighting and the costumes. Sometimes this element is called the *decor.* All amateur groups can, and should, have the artistic satisfaction that grows out of producing a suitable decor for each and every play performed.

1. *The Theme of the Play.*—The basic principle of stage design is that *the idea of the play* must be grasped and interpreted. Sometimes a play has an idea that may be expressed in a "theme." A theme of a play is the fundamental observation, in regard to human nature, on which the play is based. It is not the same thing as a "moral." But the theme is the abstract statement of the philosophy of the play. A

Shakespeare observes that a noble, impulsive nature of great beauty may have a single flaw, which becomes the cause of ruin to itself and to all around it, and he may express this conception in an old plot, and call his play "Othello." Goethe, seeing and understanding the tragedy of old age, the fact that the body wears out while understanding and longing for life increases, writes "Faust." Sometimes the theme cannot be expressed in a statement, but only as a metaphor or as a comparison. Thus, "Hamlet" has been explained as "a lonely man in dark places." Gordon Craig, the great leader of the "new movement" in the theater, expresses his idea of "Macbeth" as follows:

> I see two things. I see a lofty and steep rock, and I see a moist cloud which envelops the head of this rock. That is to say, a place for fierce and warlike men to inhabit, a place for phantoms to nest in. Ultimately this moisture will destroy the rock; ultimately these spirits will destroy the men.[1]

Sometimes, it may be impossible to express in any way the idea that the play creates. But as the play is read

[1] Gordon Craig, *On the Art of the Theater* (Brown's Bookstore, Chicago, 1911; Reprint: Small, Maynard & Co., Boston, 1924). This is perhaps the most important book so far produced on dramatic art. Craig is almost universally recognized as being the greatest single force in bringing about the "new movement" in the theater.

Other books that the modern nonprofessional stage designer should study are:

Hiram K. Moderwell, *The Theater of To-day* (John Lane, New York, 1914).

Kenneth Macgowan, *The Theater of To-morrow* (Boni and Liveright, New York, 1922).

Kenneth Macgowan and Robert Edmund Jones, *Continental Stagecraft* (Harcourt, Brace & Co., New York, 1922).

and reread, studied and restudied, by the director or the artist who is working out the design, he should grow into an understanding of the author's idea.

Then, gradually he should begin to see it in his mind's eye. This is the second step. Certain colors and certain lines should begin to associate themselves with his ideas. These are the only two things that are important in stage design—or, at least, they are the things of greatest importance. A costume may be made of the richest velvets or the cheapest of materials, but its effect will depend upon two things mainly, color and line.[2] The effect of a set of scenery depends not on the nicety of its workmanship, which may be totally lost on the audience; the two things that mark it as good or bad will be its color and line.

2. *Color in Stage Design.*—Color, then, which in the opinion of some artists is more important than line, may well first engage the attention of the designer. Perhaps the colors will force themselves upon him, and he may be unable to give a rational explanation of the fact that these certain colors signify the play to him. Perhaps he will be able to intellectualize his use of color.

That is what Craig proceeds to do in his discussion of "Macbeth":

---

[2] As a matter of fact, most art theorists recognize a third factor, which they call "mass." Professor Arthur W. Dow (see his *Composition,* Doubleday, Page & Co., 1920) adopts the Japanese term "notan," meaning "Black-and-whiteness," for this element. However, this subtle element of mass is the product of line and color, and it seems wiser to ignore it in an elementary discussion.

You ask about colors? What are the colors that nature has indicated for us? Do not first look at Nature, but look in the play of the poet. Two! one for the rock, the man; one for the mist, the spirit. Now, quickly, take and accept this statement from me. Touch not a single other color, but only these two colors through your whole process of designing your scene and your costume, yet forget not that each color contains many variations. . . .

I know you are not yet quite comfortable in your mind about this rock and this mist; I know you have got in the back of your head the recollection that a little later on in the play come several interiors as they are called. But, bless your heart, don't bother about that! Call to mind that the interior of a castle is made from the stuff which is taken from the quarries. Is it not precisely the same color to begin with? and do not the blows of the axes which hew out the great stones give a texture to each stone which resembles the texture given it by natural means, as rain, lightning, frost? So you will not have to change your mind or change your impression as you proceed. You will have but to give variations of the same theme, the rock—the brown; the mist—the gray; and by these means you will, wonder of wonders, actually have preserved unity. Your success will depend upon your capacity to make variations upon these two themes; but remember never to let go of the main theme of the play when searching for variations in the scene.

Certain technical knowledge, especially the color wheel, is useful to the designer. A color wheel is a graphic representation of all the colors, showing their relationship to one another. It is impossible in brief space to go satisfactorily into the various theories of color.[3] but perhaps the theory based on pigments is the

[3] Probably the most scientific work has been done by Albert

simplest and most useful. There are three primary colors: red, yellow, and blue. The other colors may be made from these three. Orange is a mixture of red and yellow; green is a mixture of yellow and blue; violet is a mixture of blue and red. These three colors, orange, green, and violet are secondary colors.

Colors that are opposite to one other on the wheel

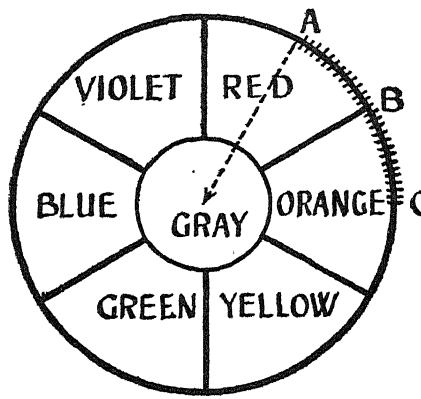


FIG. 15.—COLOR WHEEL.

are complementary colors. Thus, red has green as its complement, orange has blue, and yellow has violet. The mixture of a color and its complement produces gray—although with most pigments, a very brownish gray is produced, and not a true gray such as is formed when the pure colors are mixed on a color wheel in the laboratory.

Henry Munsell. See his *Color Notation,* (H. Ellis Company, Boston, 1913; Revised, 1916). However, he based his study on light. The scenic artist depends so much on pigment that the older, and perhaps less scientific, pigment theory seems to be more useful.

It must be understood that the space represented by any one color on the color wheel, red for example, is made up of all possible variations of that color. Thus, only in the very center of the space for red, the spot marked A, will be found a true, pure red. As the point on the circumference moves towards B, we shall have more orange, until at B itself we shall have a color half red and half orange, which we must call red-orange, for lack of a better name. As the point continues to move towards C, the red will grow less and less, and the orange more and more, until at C we shall have the point where there is a pure orange. This variation about the circumference of the wheel, is called variation in *hue*. As the point moves from the circumference towards the center of the wheel, we find more and more of the complementary color. Thus, along the line from A to the center the red gets grayer and grayer, until we have a gray similar to that which would be produced by the mixing of any two complementary colors. This variation is a change in the *intensity* of the color. There is a third way in which colors change, and that is in the amount of black or white that they contain. This is called a change in *value,* or commonly a change in shade. A color, therefore, has three characteristics: (1) *hue,* which may be determined by its place on the circumference of the color wheel, (2) *intensity,* which is determined by its nearness to the center, or by the amount of its complement that it contains, and (3) *value,* which is determined by the amount of light or darkness it contains. Thus, there is an infinite variety in every "color." As

Craig says: "Remember that each color contains many variations."

Readers who recollect Craig's suggestion of brown and gray as the basic color for designs for "Macbeth" may be worried by the lack of a brown on the wheel. For them it must be written that the color we call brown is only a variation of orange; an orange containing a large amount of black, and therefore a dark shade of orange. Technically, then, the basic colors would be orange and gray.

There are two other technical distinctions about color that arise from their arrangement on the color wheel, both of which are useful to the designer—perhaps more obviously useful than the distinctions already made. Colors that are next to one another are called analogous colors or "neighboring" colors. As a rule, analogous colors give a harmonious feeling, while complementary ones give the idea of clash or opposition. A designer may often decide to costume a group of characters in analogous colors if he wishes to show that they are a harmonious group, and in complementary colors if he wishes to show the reverse. Then there is the division into cool and warm colors. Green, blue, and violet are the cool colors; while red, orange, and yellow are warm. There is however a good deal of overlapping; a green that contains much yellow, or a violet containing much red, appears warm.

This entire matter of colors is subjective and psychological, and objective values can be determined no more than they can be in music. For most people, musical sounds of a certain kind produce a definite

feeling of cheerfulness, or depression, or some other emotion. In general, the same is true of colors. But the subtleness of the subject makes it impossible to lay down hard and fast rules to guide the beginner. He must understand as much as he can of the theory, but the only ultimate guide is his own reaction in the situation. As he learns to react carefully and truly, he will become an artist.

3. *Line in Stage Design.*—The question of line is also attendant with the same difficulty. No definite rule can be laid down as to the way different lines will affect different people. In general, however, long straight even lines give a sense of dignity and seriousness, suitable for tragedy. Sharp curves and circles suggest lightness and comedy; while jagged lines and angles produce the feeling of excitement. Vertical lines carry the eye upward, and suggest height and aspiration; horizontal lines confine the eye, and are suitable to less noble themes.

General Advice

The beginner must not be too much worried by theory. It is his task to study and restudy the play, and to attempt to work out a setting that will help interpret the author's idea. The setting must help the actors, too, and not make their task more difficult. If it is too strange and bizarre, if it calls attention to itself and not to the play, the setting is bad, however artistic and interesting it may be from the viewpoint of pure design. The play is the thing, and this fact must never be forgotten.

There is nothing supernatural about stage-designing; and there is no reason why many of the members of the Little Theater, or of the dramatic club, should not indulge in the interesting art. The steps are few and simple, and they can be taught even to children: (1) try to find the theme or the central idea of the play, (2) note two or three colors as being the key colors, suggested by the play, (3) feel what sort of lines will be most appropriate, long sweeping tragic lines, or short and jolly ones, and (4) attempt to express your ideas by drawings or, better still, by a stage model of the set (see pages 116-122) and sketches for the costumes (see pages 158-163). If in every organization steps are taken to develop good designers, by classes and discussions, by contests, and by studying the work of the many true artists that are beginning to be found on the professional stage of this country, the decor may be made one of the most interesting and successful elements in amateur play production.

CHAPTER IX

SCENERY

Definition

Scenery, in a strict sense, is the background before which the play is performed. It consists merely of the painted cloths, or the hangings, that enclose the stage. The nonprofessional designer will, however, be greatly aided if he will bear in mind a broader definition, and conceive scenery to be the place in which the action is occurring. The term will then include furniture, rugs, pictures, tapestries, and all the other possible elements that may aid in giving character to the place. A table and two chairs, carefully chosen or artistically designed, may do more to "set the scene" successfully, than all the painted cloths or hangings in the world.

Necessity for Appropriateness

The problem is to produce a place that will aid and reënforce the action that is to occur there. The scenery must have a tone, must give a feeling appropriate to the play. All its elements must be designed to aid in the production of the proper tone. And the two most important elements, as pointed out in the preceding chapter, are color and line. A light and amusing Columbine play may demand cool colors and fantastic

lines; a somber tragedy would be inconceivable in such a setting. The tragedy may require a dark background, and long straight serious lines, with a dash of warm color here and there to suggest the passion that is to be loosed in the scene. The overwhelming passion of Wilde's "Salome," the robust vigor of France's "The Man Who Married a Dumb Wife," the delicate irony of Millay's "Aria da Capo"—each of these demands an individualized setting.

"Stylization"

This attempt to catch the spirit of the play, and to express it in the setting—and also in the costumes, and lighting, and manner of acting—is what is called, perhaps unfortunately, "stylizing" the play. A stylized play, then, is one in which the director, or the artist, has attempted to bring out the central ideal by unifying his designing about certain conceptions. For example, in producing Beaumont and Fletcher's "Knight of the Burning Pestle," the artist should perceive that the authors have written a burlesque, and he should emphasize and be guided by this spirit to make all the elements in his design slightly grotesque. If he is to use a modified Elizabethan staging, as was done in one performance (see illustrations facing page 108), even the Elizabethan stage that he designs must yield to this spirit. Instead of the browns and creams that would probably predominate in an exact reproduction of an Elizabethan theater, he may use as basic colors a fantastic purple and green, making the general color of his flats a varied purple, and the woodwork of his doors

and windows a pale green. The grotesque shapes of the shingles on the roof, the slant given to all the doors, the irregularity of the windowpanes, all these lines are in the same burlesque spirit. The costumes, too, should be exaggerated. The ruffs, the characteristic part of the Elizabethan costume, may be unusually large. They may be made in unusual shapes, and so may the hats and shoes. The colors of the costumes should be even brighter and gayer than they were in the period. And, the acting, too, must partake of this joyous exaggeration.

Stylization may, of course, be carried too far; but the nonprofessional designer will find the idea of great benefit. In thinking of the setting, he must attempt to produce a place that calls for exactly the sort of action that is to occur. He may keep in mind Stevenson's remark that "Certain dank gardens cry aloud for murder; certain old houses demand to be haunted; certain coasts are set apart for shipwreck." A successful setting should give the audience the proper feeling, and should aid in giving that unity of effect which is essential to any work of art.

Classification of Scenery

Scenery may be roughly divided into two main classes: (1) draperies of unpainted materials, which are left their natural colors or dyed in solid colors; and (2) painted scenery of the more or less traditional type. Many amateur organizations, especially in schools, use draperies almost exclusively, under the impression that painted scenery is impossible for them.

This is a mistake. Audiences grow tired at seeing the same set of draperies for play after play. Painted scenery, that may be remade and repainted for different performances, is much more satisfactory; and if properly planned and executed, it is by no means excessively expensive. Professionals use painted scenery, for the most part, because of its great superiority to any other device yet discovered, and nonprofessional groups may well follow this lead. There are times, of course, when draperies may be used, and occasionally they are capable of giving exactly the effect desired. The completely equipped theater might well, therefore, possess one or two sets.

DRAPERIES

Materials for Draperies

Draperies may be made of velours, flannel, monks' cloth, hessian, denim, burlap, cotton velvet, poplin, or almost any material dictated by taste or price. With two sets of draperies, one a good light gray and the other a black, almost any play may be set. With proper lighting excellent effects may be secured. Even outdoor scenes have been successfully achieved, notably perhaps at the Neighborhood Playhouse of New York City.

Methods of Hanging

Wires may be used on which to hang the curtains, and they may be stretched from wall to wall and tightened with turnbuckle as already described for the pro-

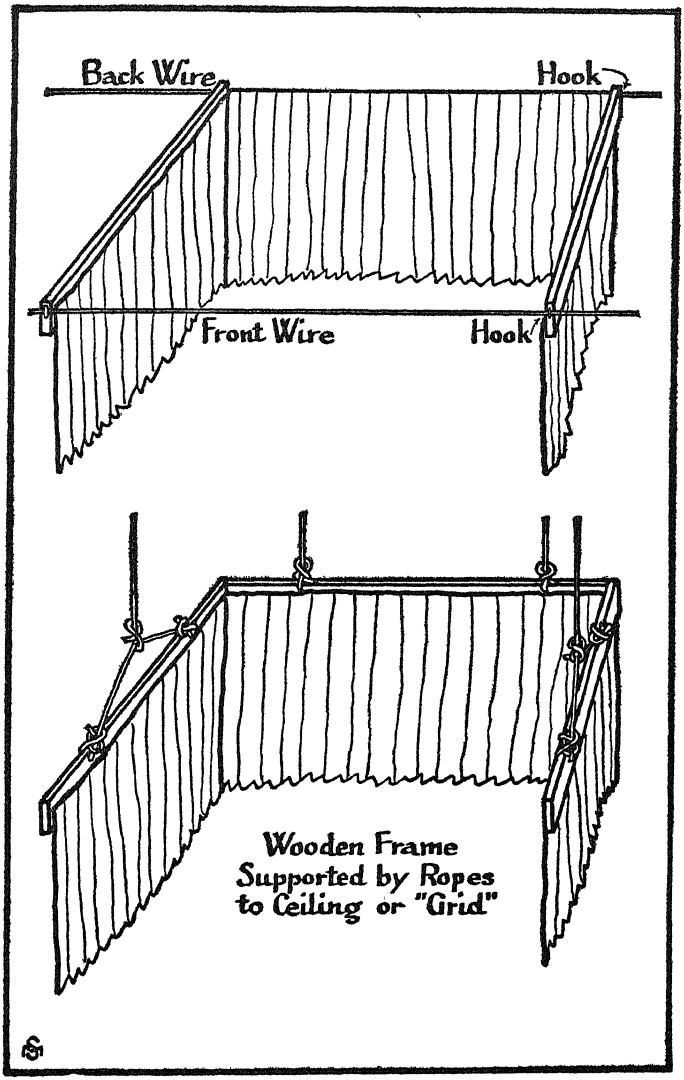
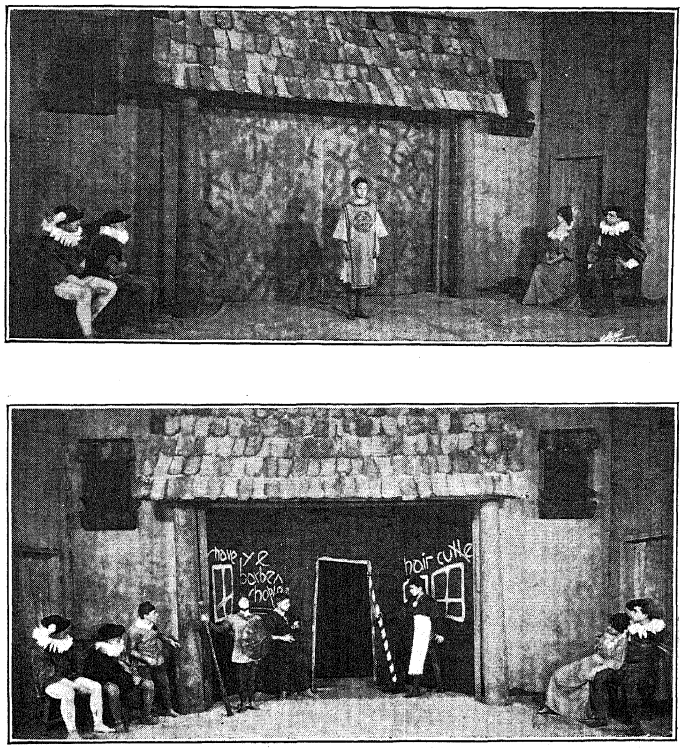


FIG. 17.—METHODS OF HANGING DRAPERIES.

scenium curtain (page 73). Sometimes wooden slats may be hung with hooks between two wires. The slats will keep the wires parallel, and curtains may be fastened to both slats and wire. Another method, common on the professional stage and more suitable when the scenery may be hung from overhead, is to build a frame in the desired shape, to which the curtains may be fastened.

Making Draperies

Professionally made curtains are usually gathered on a piece of webbing two or three inches wide, in which there are grommets, through which the curtain may be tied to wires or frames. They are weighted at the bottom by a chain run through the hem. A narrow bag of shot or of sand may be used for the same purpose. And many times, the nonprofessional producer will find it to his advantage not to have his material made into curtains at all. It can merely be cut into strips long enough to reach from his supporting wire or frame to the floor. Each of these strips may be fastened to webbing, so that they may be tied to a support; or they may be cut long enough so that they may be folded over the support at the top and pinned with long pins or wire nails. They should overlap each other about six inches. Short strips, reaching to within six or seven feet of the floor, will make openings for doors. In fact, entrances may be made between the strips at any point. Curtains of this sort are much more flexible than an ordinary cyclorama enclosing the stage.



White Studio

FIG. 18.—TWO SCENES FROM "THE KNIGHT OF THE BURNING PESTLE."

Produced by the Dramatic Club of the Horace Mann School for Boys

Compare the top scene with the artist's sketch, Figure 16. The staging is a combination of Elizabethan technique and modern methods. The curtains of the small inner proscenium are opened and closed to show the eighteen changes of scene demanded by the play. The first illustration shows the Prologue speaking; and the second one shows the scene "Before a Barber Shop."

The Use of Plastic Pieces with Draperies

Whatever the system, it is helpful to vary the effects by the use of door frames and practical doors, windows, pictures, hangings, fireplaces, and whatever else

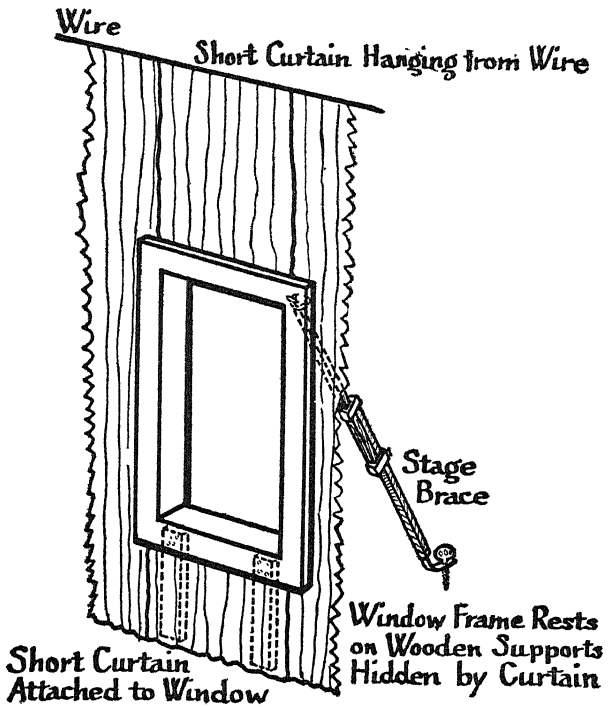


FIG. 19.—METHOD OF SUPPORTING WINDOW FRAMES IN DRAPERIES.

may be made to function with curtains. Methods of making all these things will be described later in this chapter. Notice in the illustration facing page 112, how the same cyclorama of curtains is transformed

from a comfortably-furnished room into the interior of a cabin by a few set pieces. The effect is better if there is not too much contrast between the plastic pieces and the curtains, if they have the same general tone. White, or very light, edges of plastic pieces are likely to strike the eye in a very noticeable manner.

PAINTED SCENERY

The "New" Painted Scenery

Few things have been more changed by the new movement in the theater than painted scenery, which is fortunate for the nonprofessional from every point of view. Great strides forward have been made in the last few years, and the amateur may well avail himself of the new theories and the new knowledge. Gone, forever it may be hoped, are the ornate rooms with the painted decorations, carvings, moldings, cornices; the painted shadows that stood out bravely and persistently regardless of the direction from which the light was thrown. No longer are there painted back drops in false and exaggerated perspective, so that the shadow of the hero on the stage falls on the mountains miles away in the distance. The modern stage designer attempts to secure effects by mass, and line, and color, and not by merely imitating nature. He has learned that it is more successful if he attempts to *suggest* nature than if he tries to copy her. Realism on the stage is just as impossible as it is in all the other fields of art. The intelligent selection of details is the basis of all art.

Suggestion by Choice of Detail

Instead, then, of the painted "scenes" of the past, the modern amateur designer may well imitate the professional by seeking for simplification. He will not attempt to reproduce a Moorish palace by an elaborately painted interior; he will suggest it by a single arched door. He will suggest a tiny room in the bowels of a medieval castle by a single huge round pillar, capable of bearing the weight of the building above it, as Jones did in his design for "The Jest." He will try to find the one or two objects—the doorway, the window, the fireplace—that may by characteristic treatment give the desired suggestion.

The Value of "Broken Color"

He will find the idea of using "broken color" of the greatest value. If he wants to suggest a stone wall, for example, he will not paint individual stones, and shadows, and mortar. He will try to give the "tone" of a stone wall by applying spots of gray, and brown, and gray-green. For an interior, instead of applying a flat surface, he will break up the color into its several elements and apply them one over the other. If he wishes to produce a green surface, as Geddes did in his memorable setting for "The Truth About Blayds," he will cover his surface with spots of yellow, and blue, and green, and thus secure an interesting texture, instead of mixing all his paints together and producing a flat surface, as used to be the custom. There are several methods by which this may be done, as will be

described later in this chapter, but they all depend on the same principle, that the eye mixes the colors thus applied in spots, and sees them as a whole.

Kinds of Painted Scenery

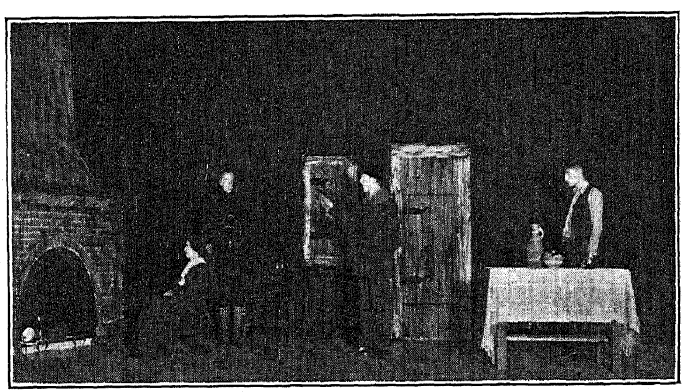
Painted scenery may for the sake of convenience be divided into three groups.

1. *Suspended or hanging scenery,* such as drops, borders, and cycloramas. Drops are wide painted curtains, hanging from above the stage and reaching to the floor. They usually form the background for scenes, especially exteriors, and represent the distant sky and hills, forests, etc. Drops painted with elaborate landscapes in perspective are being used less and less by the better professional scenic artists. Borders are really very short drops, hung parallel to the footlights so as to mask the roof of the stage. A cyclorama is a curtain that encloses the entire stage. Roughly it is a great semicircle, running from one side of the proscenium arch around to the other side. Drops and cycloramas painted blue are commonly used to make the sky of exterior sets.

2. *Framed pieces* that stand on the floor and support themselves, or flat wooden frames covered with canvas. The walls of a room usually consist of a number of such pieces, each one of which is called a "flat."

3. *Plastic pieces,* which are three dimensional. Such things as pillars, posts, round trees, door frames, window frames, stairways, platforms, and so on, are the plastic pieces of a set.

"THE GHOST STORY," BY BOOTH TARKINGTON



Stamey Photo. Co.

"DUST OF THE ROAD," BY KENNETH SAWYER GOODMAN

FIG. 20.—DRAPERIES CHANGED BY PLASTIC PIECES.

Both productions by the Central High School, Kansas City, Missouri.
Director, Virginia Robertson.

Notice how the comfortable living room in the first illustration is transformed into a humble interior by the use of new doors and window frames, and a change of furniture.

DESIGNING SCENERY

The Ground Plan

In designing the scenery, the most useful method of starting after the setting has been visualized (see

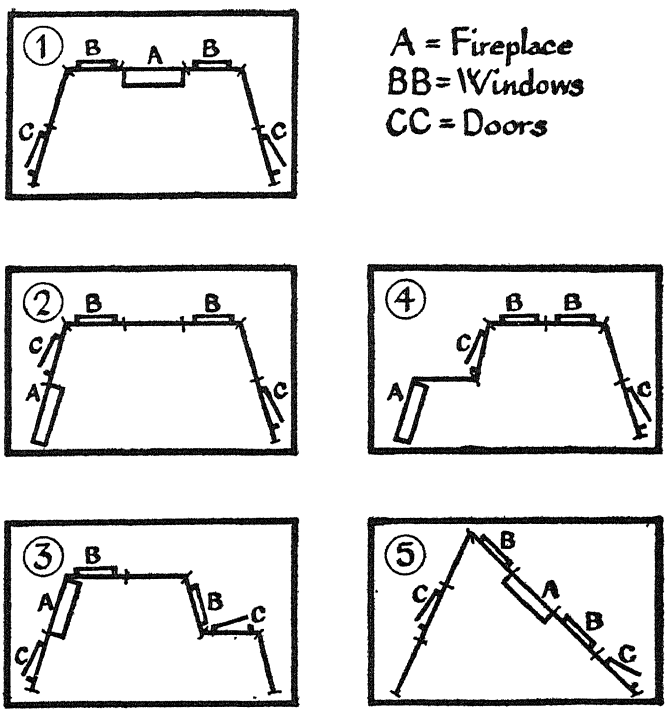


FIG. 21.—POSSIBLE GROUND PLANS FOR A LIVING ROOM TO CONTAIN TWO DOORS, TWO WINDOWS AND A FIREPLACE.

Chapter IX), is to lay out the ground plan for the set. It will be better if the artist lays out several ground

plans, and then determines which is best from every point of view. Which will be most suitable for the play? Which will be the easiest to handle from the technical point of view? Which will be the most economical to build, taking into consideration scenery and stage properties possessed by the group, which may be rebuilt and adapted? Cross-section paper is useful, and the ground plan should be made to scale. A scale of one-fourth inch to one foot will usually be found large enough.

Size of Scenery

The size of the flat must be decided during this first step of designing, the laying out of the ground plan. The height is usually determined by the theater. Flats should be preferably two or three feet higher than the proscenium opening. If the opening is nine feet, flats may well be twelve feet in height; if the opening is twelve feet, fifteen will be found satisfactory. This height need rarely be exceeded. In fact, nine or ten feet is a perfectly satisfactory height for many stages, and there is a great saving both of money and time if flats are not made too tall. If necessary, the proscenium opening may be cut down by a curtain at the top, called technically a "teaser." The width of flats should rarely exceed six feet, as a piece of scenery wider than six feet is difficult to handle. Most professional flats are made five feet and nine inches in width. This is a standard size, determined largely by the convenience with which scenery of this width can be shipped in railroad cars.

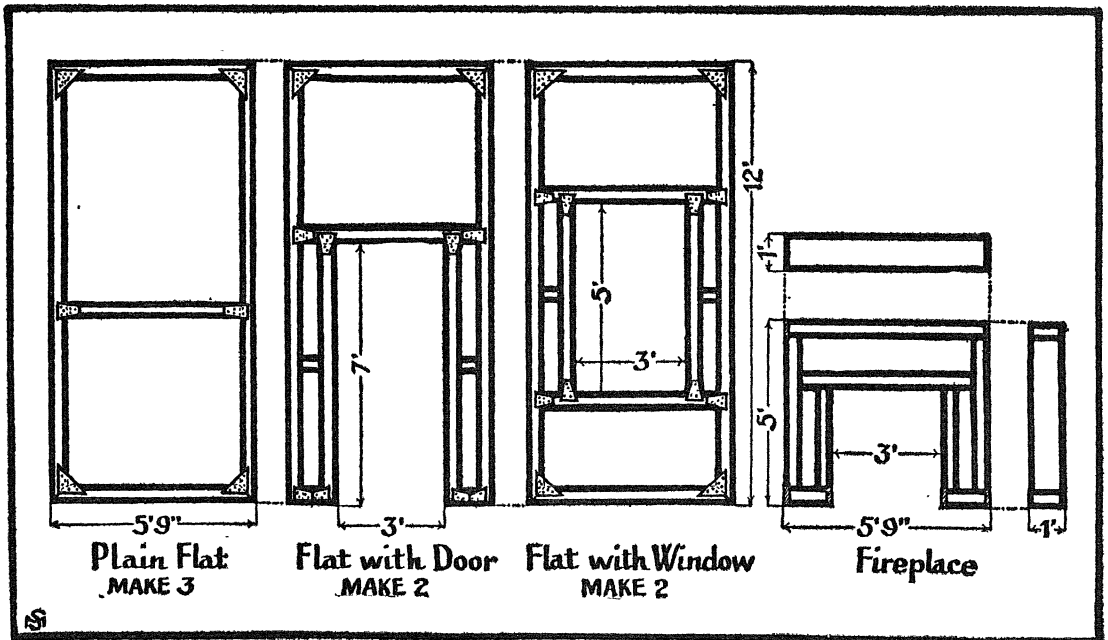


FIG. 22.—MECHANICAL DRAWING FOR A SET TO CONSIST OF SEVEN FLATS AND FIREPLACE.

Mechanical Drawing

After the layout of the scenery on the ground plan, the next step may be to make drawings from which the carpenters are to work. These should be ordinary mechanical drawings, giving the exact size of each piece required. Plain flats usually have a crosspiece, or two, called "stretchers," illustrated in the drawings on page 115. Flats are more easily handled if the stretchers are about five feet from the floor. Flats that are to contain doors or windows should have appropriate openings.

Model Making

If a careful model of the set is to be made, it may be possible to omit the making of mechanical drawings. The model should be sufficiently accurate so that the carpenters and painters can reproduce it. A heavy piece of cardboard, of sufficiently good quality so as not to warp and twist, should be used as the base of the model. It represents the floor of the stage. Every detail of the model should be made to exact scale, and one-quarter inch to the foot is a useful scale. A larger scale may be used, if desired, but it is not wise to have models that are large and unwieldy. The best and easiest material to use for the proscenium and the scenery itself is probably a heavy drawing paper, say a two-ply Bristol board with a finished surface to paint on. The main part of the scenery may usually be cut out in one piece. On all the edges of the proscenium and of the scenery itself, flaps about one-quarter of

an inch in width should be left. These are to be folded back, in order to keep the paper from warping and to give the model solidity. The flaps at the bottom will also allow the scenery to be pasted to the floor board.

Let us suppose that we are to make a model for the set described in the mechanical drawing on page 115. It consists, according to the specification, of seven flats, each twelve feet high, and five feet nine inches wide. Two of the flats are to contain doors, and two to contain windows. The doors are to be three feet wide and seven feet high; and the windows three feet wide and five feet high. There is to be a space of thirty inches between the bottom of the window and the floor.

The floor plan of the set must have already been decided upon, although a set of this sort is capable of an infinite number of variations as shown in the series of floor plans (page 113). Suppose we have agreed upon Plan 4, as one that lends itself to the play. It is probably a more interesting room than the square ones in Plans 1 or 2, and the little alcove containing the fireplace at the right will furnish some interesting possibilities for the direction of the play. To make the model we shall need a floor board which is seven and one-half by five inches, to represent a stage thirty by twenty feet. Let us imagine that our proscenium arch is twenty feet wide and ten feet high. According to our scale, the proscenium opening in our model will be five inches by two and one-half. Let us leave one and one-quarter inches around this opening, so that the proscenium arch will extend to the edge of the

floor board, and thus make a neat model. On all sides of the proscenium we shall leave flaps to strengthen it.

The set itself is to consist of seven flats, each of which will be three inches high (twelve feet) and one and seven-sixteenth inches wide (five feet, nine inches) in the model. These should be laid out side by side with window and door holes cut in the proper places. As usual, flaps should be left on each edge, even in the holes that are to be doors and windows. The fireplace, too, should be laid out to scale, as in the drawing, with flaps at every possible edge. Unnecessary flaps can be cut off as the model is put together.

All the lines in all parts of the model where the paper is to be folded should now be "scored"; that is, lines should be drawn with some blunt instrument, like the back of a knife blade, and a ruler. These lines should be so drawn that the folding will be *away* from the side of the paper which has been scored.

Now, before the paper has been actually folded, is the time to paint it. Let us suppose that our walls are going to be a light gray, our floor brown, and the woodwork of our room a cream-white. The floor board will be painted the proper brown; the walls a good gray. It is wise to make the proscenium black, unless the model is for some specific stage, when the proscenium can be painted its true color. We need not worry as yet about the woodwork of the room, for that may be added after the model is set up. During the painting it is well to pin the paper to a piece of wood or heavy cardboard in several places, so that it will not warp with the moisture. Ordinary water-color paints

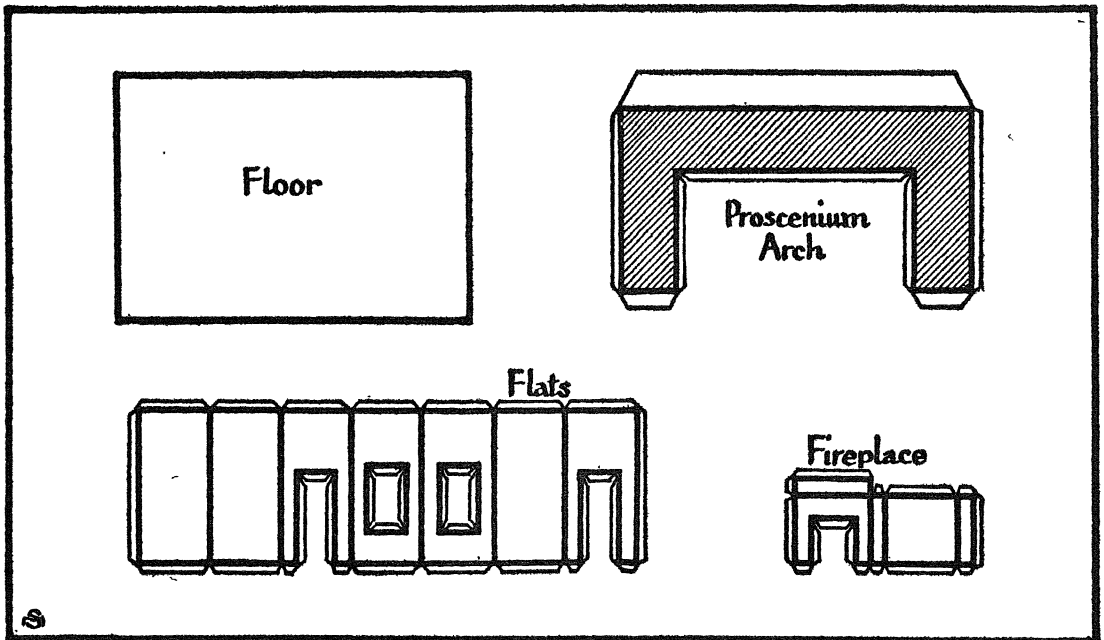


FIG. 23.—BASIC PIECES FOR THE SCENE MODEL.

should be used. There is no need to paint the flaps.

After it is thoroughly dry, it may be folded as scored, and pasted together with library paste or glue. The flaps on the bottom of the flats will hold them to the floor, and the flaps on the two ends may be pasted against the proscenium arch.

In a good set, and hence in a good model, the wall will be given the appearance of thickness by the insertion of door jambs and window frames. These may be made of paper and inserted, just as frames are inserted in real flats (see page 134), or thin strips of paper may be pasted around the edge of the openings against the folded-back flaps. When this woodwork is painted, and the fireplace is completed by folding and pasting and placing in position, the model is complete.

If properly made as directed, it should give a very accurate idea of what the scene will be like. It should be strong enough to stand even rough handling in the studio and the shop, and it should be accurate enough in size and color so that the carpenters and the scene painters can work from it. By using colored lights on it, even by putting colored tissue papers across the top and shining light through, it is possible to learn much about the proper lighting of the particular set.

If several artists have varying ideas of how the play should be mounted and each one is required to produce a model, the several models can be compared and the best set selected as can be done in no other equally certain manner.

Complicated models may be made according to the same general principles. Posts, platforms, stairs, or

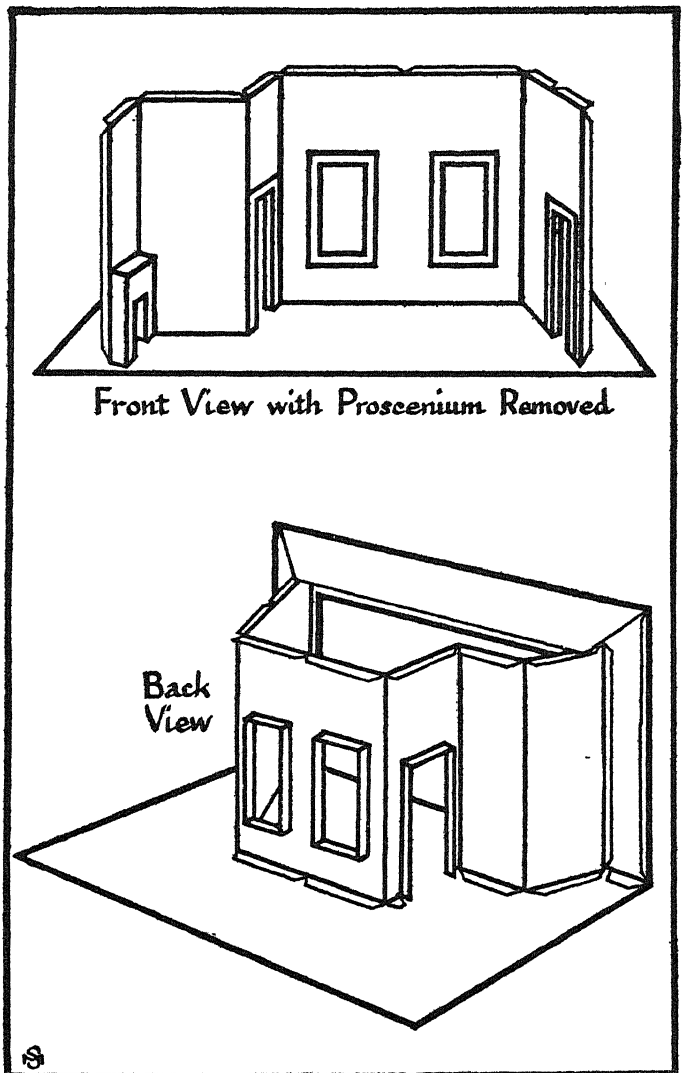


FIG. 24.—SKETCHES OF COMPLETE STAGE MODEL.

anything imagined, may be made of paper and paste and paint. If the model is very large, wood or heavy cardboard may be necessary to give it solidity. There is no rule as to method, and no limit as to material. Some professional models are made of wood and cloth. The need for ingenuity and cleverness, and the opportunity for true artistic work, makes model-making one of the most fascinating parts of the dramatic process.

MAKING SCENERY

Material

After the scenery is visualized and the drawings or the models are ready, the next step is to make it. Either unbleached muslin sheeting, which may be secured in six feet widths, or theatrical canvas, are the materials commonly used. Theatrical canvas is very little more expensive than muslin, and as it is usually fireproofed, it is better on the whole.

Drops

If drops, or wide curtains, are called for by the specifications it will be necessary to sew widths together. Lapped or double seams are better than plain ones, as they make a flat surface at both sides of the cloth, and they are stronger. A batten, or strip of wood, should be placed at both the top and bottom edge of all drops. The drop will hang from the top batten, and the bottom one acts as a weight and holds the curtain flat. When not in use, drops are rolled on the battens.

Flats

Usually, a number of flats will be called for, and these are quite simple to make if the proper process is followed.

1. *Material.*—The best material of which to make the frames on which the cloth is to be stretched is one inch by three inches white pine stock. Selected lumber, straight and free from knots and blemishes, is best; although what is called "tight-knot pine" is possible. Fir or spruce is also used.

2. *Framing.*—The process of making the flats according to the drawing on page 115 will illustrate the method. For the plain flats, two upright pieces, each twelve feet long, are needed, and three crosspieces. Most professionally-made flats have mortise and tenon joints, but they are very difficult to make, and they are entirely unnecessary. A miter corner joint is almost as strong, and is simpler to make. In a mitered joint, the ends of the pieces that come together are each cut at an angle of forty-five degrees. The forty-five degree cuts can easily be made if a regular miter box is available. If necessary, a homemade miter box will serve every need. It is merely a wooden trough, as in the illustration, containing sawcuts at the proper angles. The batten is placed inside and held against one side of the miter box, while the angle is cut, preferably with a back-

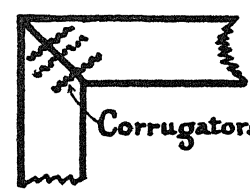


FIG. 25.—MITERED CORNER JOINT.

saw, because it makes a smoother cut than an ordinary crosscut saw. After the two side pieces, and

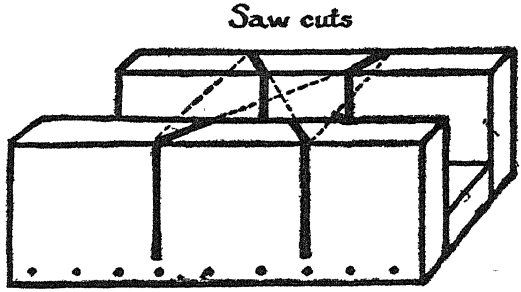


FIG. 26.—HOMEMADE MITER BOX.

the top and bottom pieces, are cut to the correct shape and length, they can be placed together on the floor,

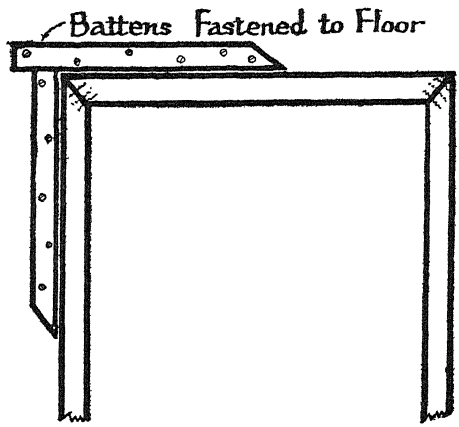


FIG. 27.—RIGHT ANGLE TO HOLD FRAME.

and fastened with the one-half inch or five-eighth inch saw-toothed corrugated fasteners, or "corrugators," which can be secured in any large hardware store.

A right angle should be held against the corners during the process. If many flats are to be made, a right angle may be made on the floor with battens, into which the corner of the flat may be pushed during the nailing process. The stretcher may then be added. It should be exactly the correct length to slip in between the two upright pieces, making a butt

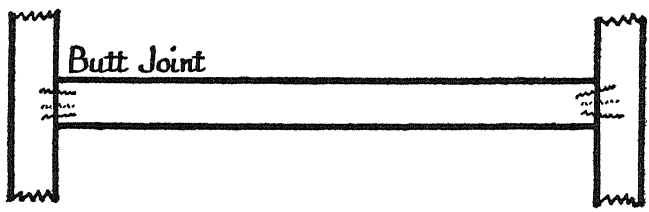


FIG. 28.—THE STRETCHER.

joint at each end. It should be nailed with corrugators, two on one side and one on the other, as shown in the illustration.

3. *Corners and Keystones.*—Now, these six joints should be reënforced by what are known as corners and keystones.[1] These may be homemade, but it is worth while to purchase them from some theatrical supply store. They are made out of three-ply veneer wood, and are very tough. They come in various sizes, and are usually but a few cents apiece. The six-inch size is very satisfactory. They may be screwed on to the joints, or fastened with one and one-half inch "clout

[1] Current dramatic magazines, such as the *Theater Arts Monthly* and the *Drama,* usually contain many advertisements of dealers in theatrical hardware and supplies. Producing groups would do well to find a reliable dealer in their district who can supply them with necessary materials.

nails." If nails are used, a clinching iron under the joint to turn the nail back into the batten makes the process much more rapid. Both corners and keystones should be placed one inch in from the edges, so that

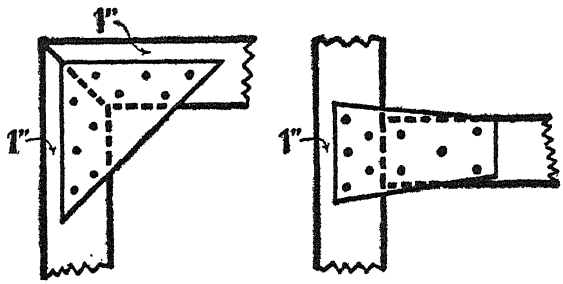


FIG. 29.—JOINTS WITH CORNERS AND KEYSTONE.

the completed flats can be set at right angles to each other and make a smooth corner. The completed framework is shown in the mechanical drawing on page 115. In a similar fashion the flats containing the holes

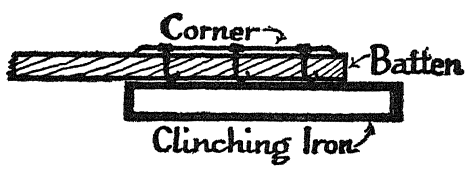


FIG. 30.—METHOD OF CLINCHING NAILS.

for the doors and windows are made according to the specifications. Covering the frames with the cloth is the next step.

4. *Tacking the Cloth.*—For this purpose, the frame should be placed on benches or horses that will raise it

about to waist level, as it is a back-breaking job to cover frames while they are lying on the floor. The face of the frame, the sides without corners or key-stones, should be up. The canvas or the unbleached

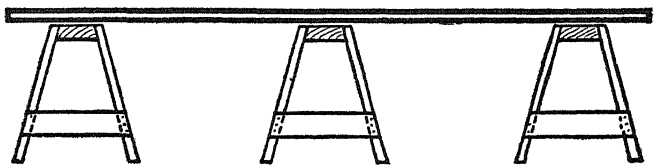


FIG. 31.—FLATS PLACED ON HORSES FOR COVERING.

muslin should be cut roughly somewhat larger than the frame, laid over the frame, and tacked along the inner edges with ordinary carpet tacks. The center of the

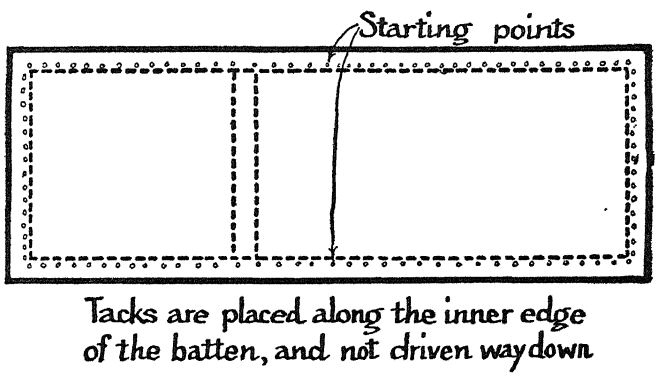


FIG. 32.—METHOD OF TACKING THE CLOTH.

long sides should be the starting points, from where the tacking should be continued to one end of the frame, a man working on each side so that the material is at all times being pulled evenly and parallel. In the

same way, the material should be tacked towards the other end, and then the ends should be tacked. The pull on the material should always be towards the ends, and the material must not be stretched too tightly, as it shrinks with the painting. The important thing to

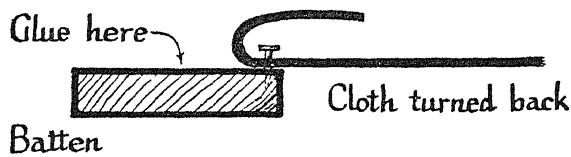


FIG. 33.—METHOD OF GLUING THE CLOTH.

note is that the tacking is along the *inner edge of the batten,* and the *tacks should not be driven way down,* but should be allowed to project a quarter of an inch.

5. *Gluing.*—After the tacking, the cloth is turned back everywhere to the tacks, exposing the greater part of the batten again. The wood is painted with glue, the cloth pulled back over the glue, and set into it by rubbing the surface out from the center with a cloth dampened with hot water. Use ground glue, which can be secured from any hardware or paint store, melted in an ordinary iron glue pot, or in a double-boiler arrangement of buckets. Some whiting should be put into the glue, so that the canvas will not be too much discolored along the edges by the glue. Use about one part of

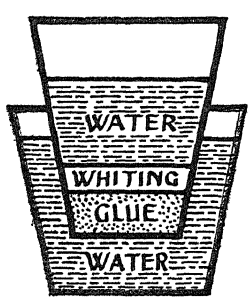


FIG. 34.—PREPARING THE GLUE.

whiting, and two parts of glue, to six parts of water. Rub the hot mixture on to the wood with a fairly stiff brush. After the glue is thoroughly dry, the tacks may be removed with a claw hammer or a pair of pliers. The overhanging cloth should be cut off flush with the edges of the frame. The flat is now ready for painting.

Fire-Proofing

If not already fire-proofed, scenery may be made so by spraying the back surface before painting with a saturated solution of alum.

SCENE PAINTING

Priming Coat

The first step is to prepare the surface for painting, by a priming coat, which will give a smooth, sized surface on which to paint the colors. The materials for this coat will be the same as those used for the glue with which the cloth was fastened, and they should be made in the same way in a double boiler, except that a greater proportion of whiting will be needed. A good recipe is three or four pounds of whiting and one pound of ground glue to about six quarts of water. When the solution is at a proper consistency the solution causes one's fingers to resist a slight pull when pressed together. This priming coat should be applied hot. The surface should be painted carefully, so that no gaps are left. A six- or eight-inch brush is best. Brush strokes should be made promiscuously in all directions, so that the surface is thoroughly covered.

For this painting, and for all that is to follow, it is usual to hang the drops vertically, and paint from a ladder or a "bridge." A bridge is an elevated platform, so placed that the drop may be raised or lowered so that each part of its surface can be reached. However, it is perfectly possible to spread drops out on the floor for painting. Flats may be placed either vertically or horizontally, but they should be nailed to a "paint frame," a flat wall or a floor, so they will not warp.

Making Colors

After the priming coat is dry, the colors may be painted on according to specifications or, better, according to the model. The color will be made in a similar way to the priming coat, with color pigment substituted for the whiting. Dry, ground pigments may be secured in any paint store. They vary in price according to the color. By mixing the pigment with the hot water, the glue, the whiting or black pigment, any tint or shade desired can be made. No rule can be given for the amount necessary to cover any given surface, but the material is so cheap that it is wise to make a generous amount, as matching colors is exceedingly difficult. If the paint does not cover the surface properly, it is too thin, and more glue and pigment should be added; if it has a tendency to crackle off after it is dry, it is too thick, and must be made thinner by the addition of more hot water—next time!

Outlining Design

If a design is to be painted on the surface, it is wise

to outline the design with charcoal. Straight lines may be made with a beveled straightedge, used with the beveled side down. A sketch, such as a scene for a back drop may be enlarged by means of squares on the sketch and on the drop done to the proper scale.

Some Common Methods of Painting

As has been suggested above, amateur scene painters will do well to avoid applying a flat tone of paint on any surface. Broken color surfaces are much easier to do, and they are much more interesting under lights.

1. *Sponging.*—A large sponge is trimmed so that it has a flat surface. It is dipped into the paint, wrung out, and the flat surface of the sponge is painted on to the surface to be painted. The result is a pattern of spots made by the face of the sponge. The sponge must be constantly turned to left and right during the patting, so that the outline of the sponge will be lost in the larger pattern of spots. But it must not be turned *while it is on the surface.* Several colors may be sponged on, one over the other. Sometimes a solid color may first be painted on the surface to be sponged, as a sort of background.

2. *Cloth Rolling.*—A large cloth may be dipped into the paint, wrung partly dry, and then while still twisted rolled across the surface to be painted. A variety of effect may be secured, as in sponging, by using several colors, one over the other, and by changing the direction of the rolling.

3. *Spattering.*—A brush is dipped in paint, which is spattered on to the surface by shaking the brush or by

snapping it so that the paint falls on the surface in small drops. This is, perhaps, the commonest means used in professional scene-painting studios. The surface to be spattered may be vertical or horizontal; but if it is vertical it is necessary to have the paint suffi-

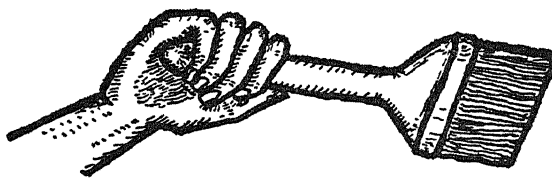


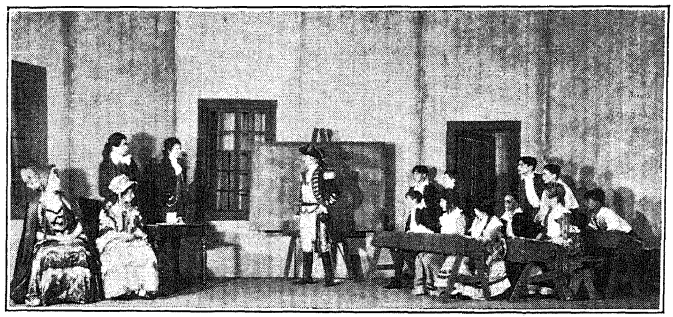
FIG. 35.—METHOD OF SPATTERING.

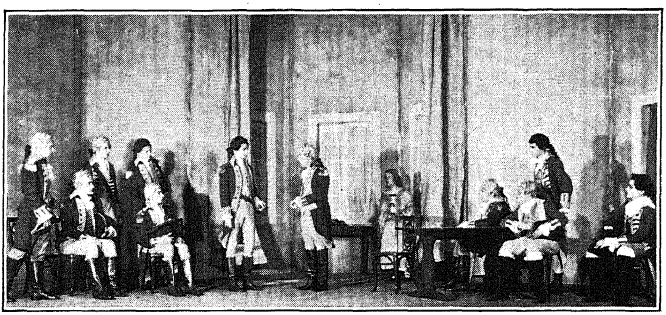
ciently thick so that the spots will not run from gravity.

4. *Puddling.*—The surface to be covered is placed horizontally, and the paint is poured on, then pushed about and blended by a large brush. Several colors may be used, usually variations of the same color, such as two or three shades of green and a green-yellow. This process can be very rapid if one person is appointed to take a bucket of each color and simply pour it on as needed, while one or two others with brushes blend the edges of the colors by running them together.

Need for Boldness and Exaggeration

In scene-painting, as in all other departments of dramatic work, the nerve to try anything is a great asset. The amateur painter must boldly go ahead and follow directions, and learn from his own successes and failures. He must remember that he is painting scenery, and not pictures. Everything about scenery may be





White Studio

FIG. 36.—TWO SCENES SET WITH IDENTICAL FLATS AND DIFFERENT PLASTIC PIECES.

Both scenes from Clyde Fitch's "Nathan Hale" as produced by the Dramatic Club of the Horace Mann School for Boys

By a rearrangement of the flats, and a change of the plastic pieces—door frames, window frames, etc.—the "School Room in New London, Connecticut" of Scene 1 becomes "A Room in Colonel Knowlton's Mansion, New York City," of Scene 2.

intensified and exaggerated. Fine outlines and minor details are lost in the theater. The roughnesses and the apparent crudities of the painting do not show under lighting; in fact they usually cause the results to be more satisfactory, as they make the surfaces more interesting. The only general rule for scene-painting, therefore, is to proceed boldly, observe results, and learn from experience.

MAKING PLASTIC PIECES

Doors and Window Frames

Probably the most common plastic pieces that the amateur scene-makers will need will be door and window frames. They should be used with every set. Nothing looks more "amateurish," in the worst sense, than scenery in which the doors are mere holes in the flats, and which show that the wall has no thickness. Moreover, the use of doors and windows lends great variety to a set. For example, the set sketched above on page 115, and shown in the model on page 121, can be adapted for any number of interior scenes, by the use of new door and window frames. One set of frames may be cream-white, one a bright green, one a dull brown, and so on. By rearranging the pieces of the set (see the ground plans on page 113), changing the frames, and the furniture and hangings, this one set may give many effects. Some of the door frames may contain portières, and some real doors. The windows, too, may be varied by the use of all sorts of curtains. Tapestries and pictures on the walls are very useful.

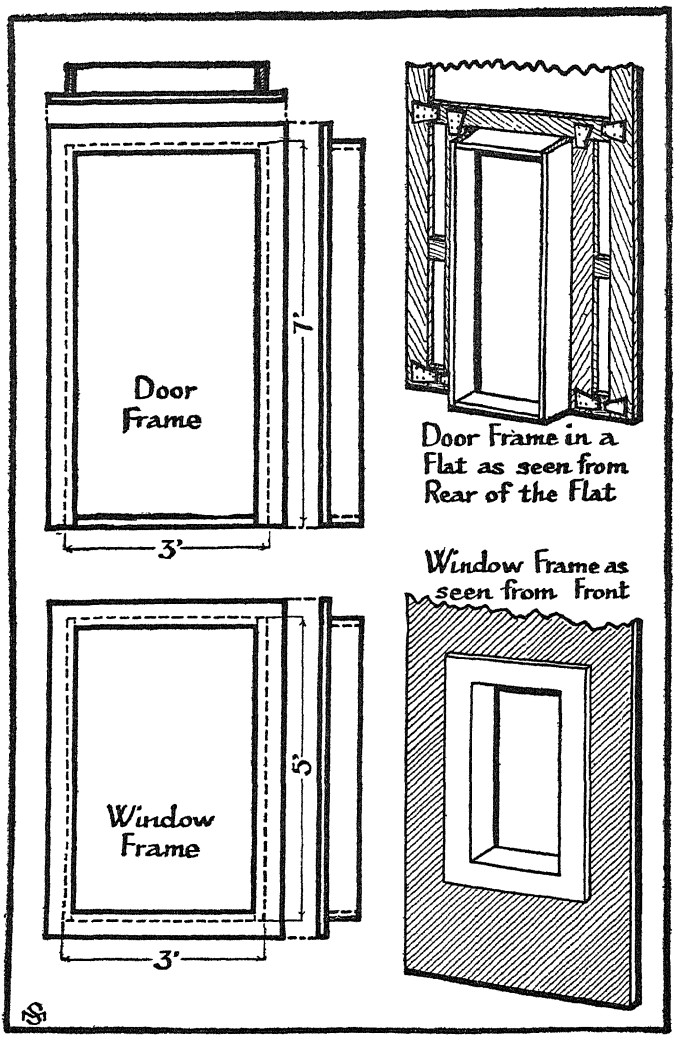


FIG. 37.—DOOR AND WINDOW FRAMES (TO FIT FLATS SHOWN IN PLANS ON PAGE 115.)

The frames are made so that from the front they appear just like ordinary frames in a house. They may be wide or narrow, plain or ornate. The lighter they are, the easier they are to handle, and the less must they be braced. They should fit snugly into the hole, but they should slip in and out without pounding. A few screws through the batten of the hole and into the frame will hold the frame securely in place against the surface of the flat.

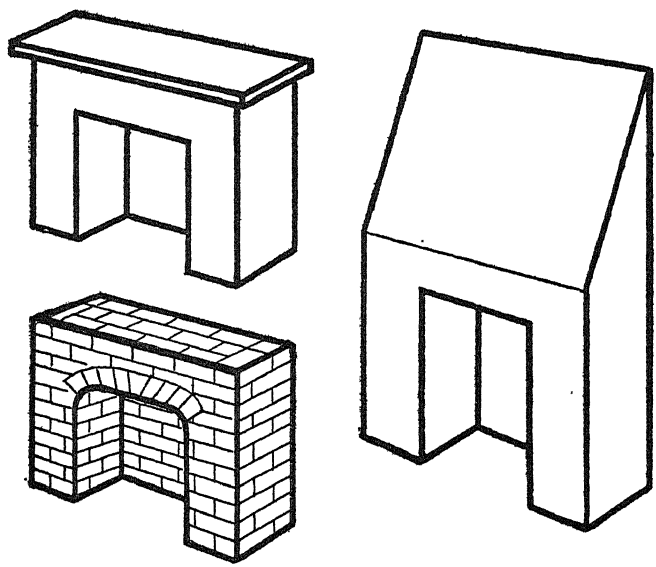


FIG. 38.—FIREPLACE POSSIBILITIES.

Fireplaces

Fireplaces of different sizes, shapes, and colors help very much in properly setting a scene, and they some-

times aid greatly in the lighting of the play. They can best be made of a frame of battens, covered with canvas, which is primed and painted in the usual way. The fireplace should be able to stand in front of a plain flat, or in front of one containing a door or window hole. It is unnecessary to have a specially cut flat. If a light is used in a fireplace, an electric wire can be run along the floor under the flat. As a rule, it is well to avoid ornate fireplaces with elaborate designs of stone or brick. Plain solid colors will do, the same as for the set.

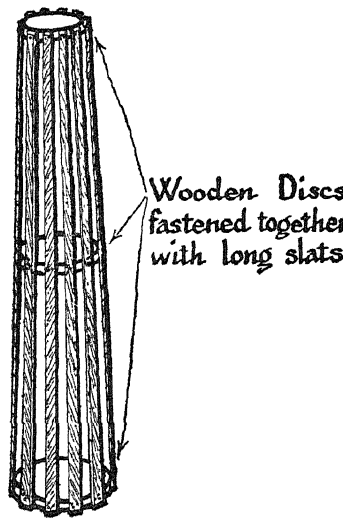


FIG. 39.—FRAME FOR POST OR TREE.

Posts

A post, or a tree trunk may be made, in a similar way, of a wooden frame covered with canvas. A num-

ber of wooden circles may be fastened together with long wooden slats.

Platforms and Steps

Platforms and stairs are often very useful pieces. The illustration on page 138 shows a common design for a platform, which has the advantage of folding flat, so that it can be stored in a small space. Notice that there are hinges on each inner corner of the supporting frame. When the frame is opened out it may be braced if necessary, although if the top is made carefully enough it ought to hold the frame rigid. Stage stairs usually have a lower lift than ordinary stairs, and a wider tread. This makes them easier for the actors to play on. The standard dimensions are for the lift six inches high, and for the tread one foot wide. If stairs and platforms are made to a similar dimension, interesting combinations may be made. Thus, in the illustration, where the standard size is three feet long, three feet wide, and one and one-half feet high, the platform placed at the end of the stairs raises the unit of stairs so that a continuous flight of steps is made. With two or three units of both stairs and platform all sorts of interesting combinations are possible.

Rocks, etc.

Rocks may be made by covering wooden frames or boxes with canvas, stuffed so as to be irregular in shape, and painted in the usual way. Walls, benches, wells, and many other plastic pieces may be made. In

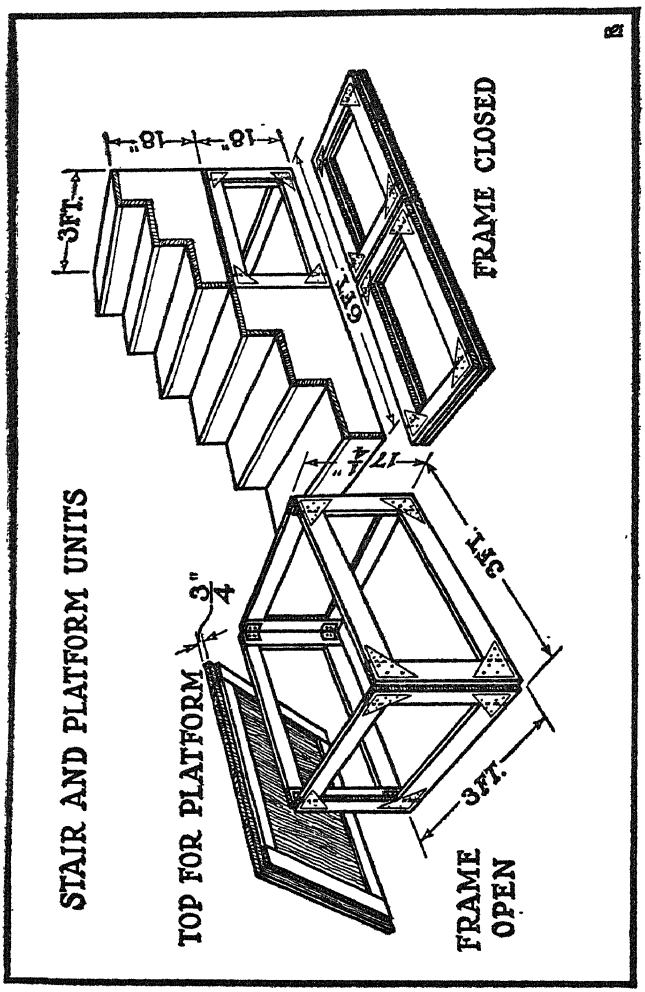


FIG. 40.—MECHANICAL DRAWING OF PLATFORM AND STAIRS.

fact, the only limit to the possibility for plastic pieces is the ingenuity of the designer and the maker.

GENERAL SUGGESTIONS

Useful Colors

It is sometimes wise to plan scenery so that it can be easily adapted to other plays. A set, such as is suggested in the drawings and in the model previously in this chapter, painted a neutral gray, is exceedingly useful. Gray is a combination of all the colors (see the color wheel on page 98). The painter will be wise to follow the modern practice, however, and use broken color. An excellent scheme is to spot the surface with the three primary colors, red, blue, and yellow. These should be sponged or spattered equally and evenly, although there need be no attempt to touch every spot on the canvas. Each coat must be allowed to dry before the next one is applied. The final coat should be a gray made of about one part of black to four parts of whiting. It may be sponged on, or painted on thinly and evenly with a brush. This surface will take any lighting equally well. The novice may wonder why the trouble must be taken to put on the spots of red, blue, and yellow if they are to be covered by the final coat. The reason is to be found in the lighting. A surface so made is greatly changed by colored lights. When a blue light is thrown on it, the blue light reenforces the almost-invisible blue spots ("picks them out," the electricians say) and makes the surface appear almost blue. The same is true of the red and yellow

spots: they are picked out by the lights of their own color, and interesting and puzzling light effects may thus be secured.

If desired, the gray may be painted on first. Then, the surface had better be sponged with grayed colors. A good effect is secured by spotting the gray surface with green-gray, violet, and yellow. The same process may be followed with any color combination. A good "red room" may be made by sponging or spattering with red-yellow, violet-red, and gray-red; a good "green room" by using yellow-green, blue-green, and gray-green. In almost any combination of this sort it is wise to mix a good deal of whiting—say four parts of whiting to one part of color as a general rule.

Combination Sets

Some very interesting suggestions for adaptable scenery have been made. Gordon Craig has suggested, and used, sets of screens. These screens are of the same heights, but of varying widths—say one foot to six feet. With them a stage of almost any shape may be set, and they are capable of suggesting both interiors and exteriors. Hume, at the Detroit Arts and Crafts Theater, worked out a scheme of combination pieces, consisting of pylons, platforms, flats, stairs, screens, curtains, and other units. With these he set as many as seventeen different performances in one season, in such a way as to win universal approval and praise from all who saw the sets. The experiment is well described in Cheney's *The Art Theater,*[2] in pages that

[2] See Note on page 5.

should be studied by all nonprofessional stage artists. Both the screens of Craig and the combination units of Hume were painted the broken-color gray described above.

Ceilings

Few amateurs use ceilings in their sets, although there is no reason why they should not. A ceiling is merely a flat piece of scenery, made just exactly like

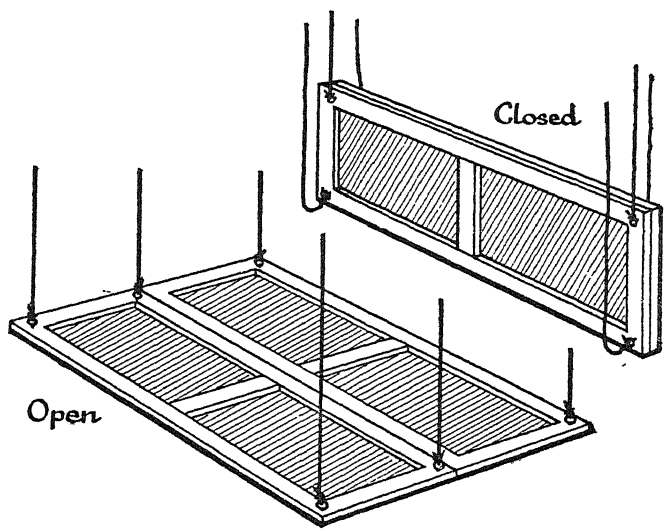


FIG. 41.—BOOK CEILING.

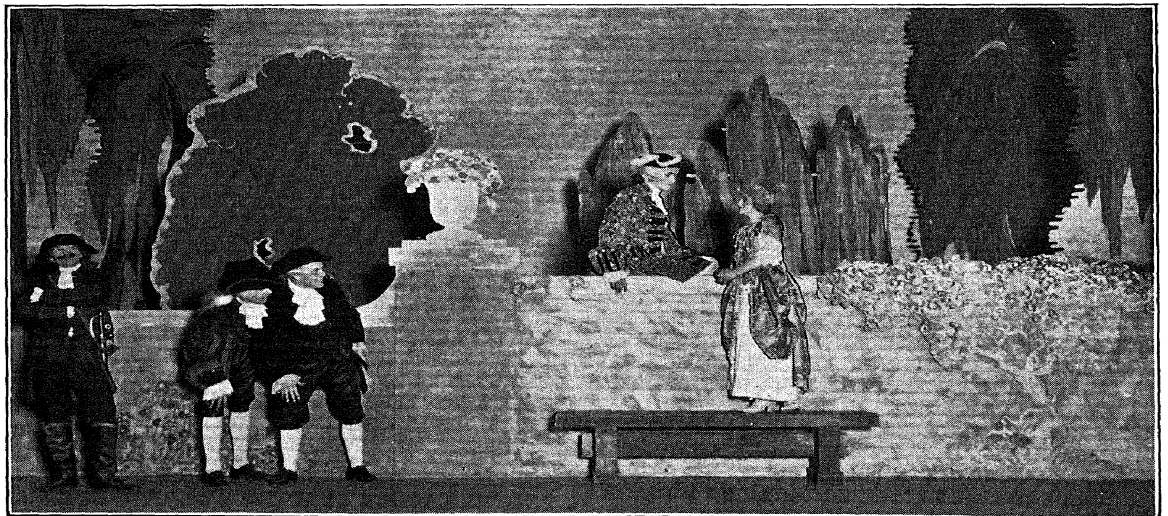
any other flat, which is lowered on to the top of the set. If there is plenty of room over the stage, it may easily be handled by ropes through pulleys in the ceiling or the "grid" (see page 145). Even where there is little room, a "book" ceiling can be made. A book ceiling

merely two flats so hinged together that they open and form one piece when placed in position. Notice that the hinges must be on the bottom side, the same side as the cloth, or else the "book" will not close. A ceiling makes borders unnecessary, and should certainly be used where a single interior is built that need not be changed for the entire play.

Exteriors

Most of the discussion in this chapter has applied to interiors. Exteriors are often more of a problem. This problem is greatly simplified if the designer has a good sky cyclorama as the basis of his exterior designs. Each amateur group should, therefore, try to secure a good sky "cyc." The best ones are made of plaster, which is much superior to cloth for creating a sky illusion; for plaster is not sensitive to climatic changes, and it simulates infinite depth because its granular surface catches the light and breaks it up into a more vibrant and diffused medium. Many modern theaters are built with a plaster sky cyclorama, and all theaters should be so built. It is nothing more nor less than a plaster wall at rear of the stage, with rounded corners that extend on each side toward the proscenium arch. All sets are put up inside this cyclorama, which is convenient even for interior sets which show the sky or a landscape through a door or window.

It is not absolutely necessary that the ends of the wall be rounded, and if nonprofessional groups have a bare back wall at the rear of a stage, it should be turned into a sky cyclorama by plastering and painting



Stamey Photo. Co.

FIG. 42.—AN EXTERIOR OF CONVENTIONALIZED TREES.

Rostand's "The Romancers," as produced by the Central High School, Kansas City, Missouri.
Director, Virginia Robertson.

Note the appropriateness of the conventionalized trees in a fantastic setting of this sort. The cut-out wall, which would not be suitable for a realistic play, is altogether fitting in a setting which is purely a design.

at the earliest moment possible. The painting should be a broken color blue, made of two or three shades of gray-blue. The paint can be spattered on, but should be smooth and even. If a plaster wall is impossible, a sky cyclorama of cloth must serve. Some way of stretching it tight should be invented, for nothing is more distressing to illusion than the sight of wrinkles in the sky. A large drop, properly painted, will often be sufficient, although this necessitates masking the ends of the "sky" on each side with flats of some sort.

When a sky "cyc," or a painted back drop, is used, it is often necessary to use a "ground roll," which is a low profile representing the horizon, masking the meeting place of the sky and the stage floor. It may represent distant hills or forests, and it also hides the floor lights that illuminate the "cyc." (See page 221.) The ground roll may be made in the usual way with canvas stretched on a frame, or it may be cut out of profile or beaver board. It need not be more than six inches or a foot high, and should stand a foot or so in front of the bottom of the drop. Profile board is a three-ply board made especially for "cut outs," such as trees, ground rolls, or other irregular edges. It may be secured from theatrical supply houses.

Exteriors should be kept as simple as possible. Lights must often be depended upon for most of the effects. The ornate profile trees and borders, which deceive no one, should be avoided. Color is the main thing. A successful setting for "The Tempest" was merely a huge cyclorama of flats enclosing the stage. They had been painted with six inch stripes of purple

and orange. Over these stripes, several different greens were roughly sponged: gray-green, brown-green, yellow-green, and small spots of bright green. The set, properly lighted, gave the general tone of a thick forest of varying greens, while the vertical stripes of purple and orange, hardly visible through the green, suggested the up and down shadows or tree trunks disappearing in the distance. Another method of making a good forest background is to puddle the surface with the several greens.

If actual trees are called for by the play, it is wise, whenever possible, to conventionalize them, as in the illustration for "The Romancers," facing page 164. The stage design then becomes a mere pattern, which the audience accepts. It sees that no attempt is being made to make real-looking trees, and is not bothered by the fact. The one thing to be always avoided is the mixing of reality and fancy. A painted background of a forest, with two or three real trees that have been dragged in from a forest, is always a failure. As artists say, the designer must stay in his medium.

HANDLING SCENERY

"Flying" Scenery

The problem of handling scenery back stage during the performance is simplified in a theater which has sufficient overhead space and proper equipment so that much of the scenery can be "flied." "To fly" a piece of scenery is to drag it up out of sight. For this reason, a theater should have at least as much room

above the top of the proscenium arch as below it. Some recent theaters have twice as much: if the proscenium arch opening is thirty feet high, there is a space above that of almost sixty. At the top of this space, about six feet from the roof of the stage, is the "grid-iron," which in the modern theater is an elaborate grating or rack of steel. Men who are working on scenery may walk around on top of the grid, and blocks and pulleys may be fastened to any part of the underside.

Method of "Flying"

Three single pulleys fastened to the grid at equal distances from each other, and in a line parallel to the footlights, make it possible to support a drop of almost any length. The ropes that go from the top of the drop to the pulleys should all be turned in the same direction (to the left in the illustration), run through a triple pulley, and down toward the floor to some place where they can be tied. Once every theater had a stout railing containing a series of pins around which the ropes could be tied. Sometimes this pin rail was on the floor, and sometimes it was placed up and out of the way in a raised gallery. There are many patented devices to-day by which drops are counterbalanced, and the hauling is often done by motors, so that old-fashioned pin rails which depended on muscles for the hauling are fast disappearing. A set of pulleys and ropes so arranged that they hold a drop is called a set of lines. The more sets a theater has the easier it is to handle scenery.

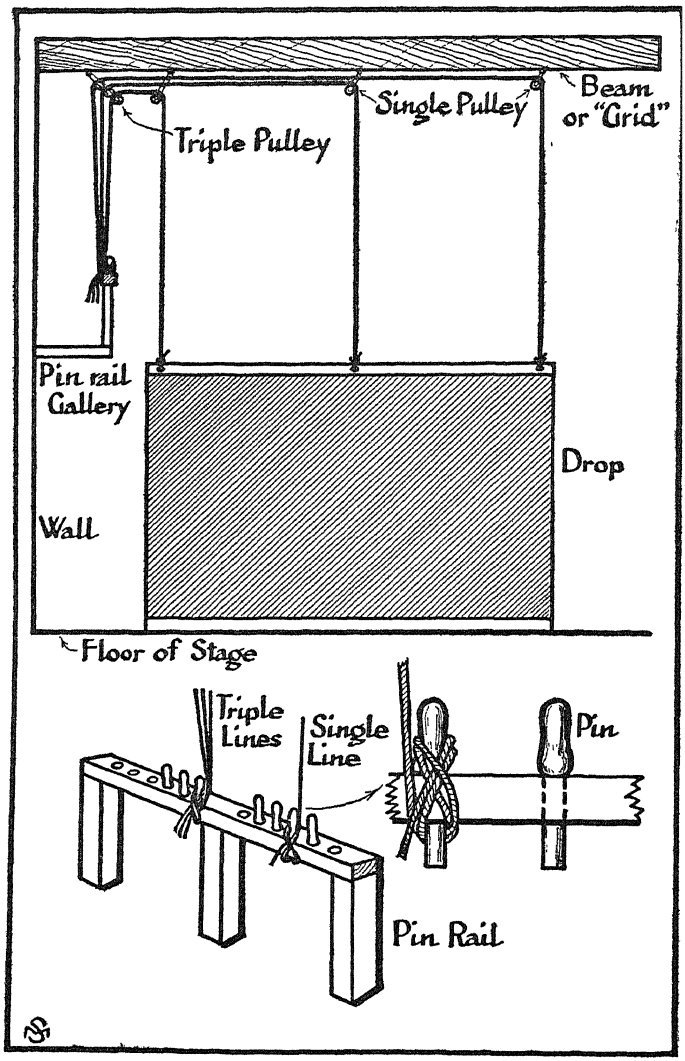


FIG. 43.—METHODS OF FLYING DROPS, BORDERS, ETC.

A Homemade "Grid"

Nonprofessional producers should attempt to reproduce as much of this arrangement as they can. Even the smallest theater may have something that serves as a grid, though it be only a heavy beam or two solidly

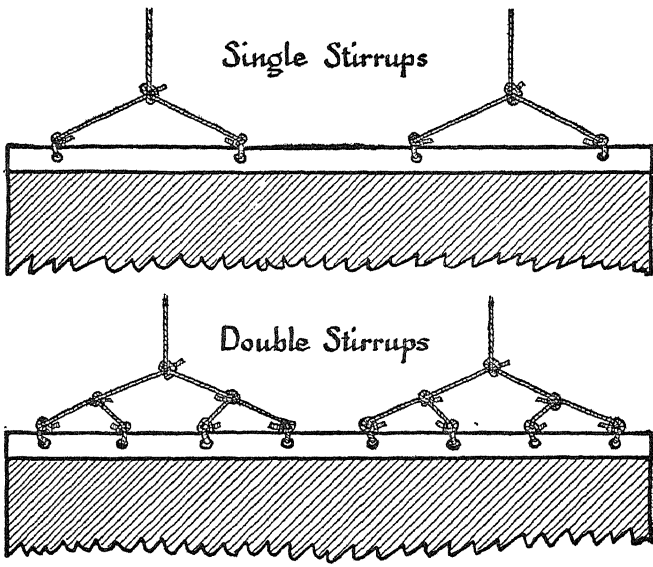


FIG. 44.—METHOD OF DISTRIBUTING WEIGHT OF DROP WHEN THERE ARE NOT SUFFICIENT LINES.

fastened to the ceiling. If necessary, a framework of wood or of piping can be supported from the floor. Two lines may be made to support a drop of any length by the device of using stirrups to distribute the weight. If there is not sufficient overhead room so that drops may be hauled up out of sight, it is necessary to lower

the drop, and unfasten the lines. The drop can be rolled up, and thus disposed of, while the lines may be pulled up. When a set of lines is vacant, it is wise to tie the ends together, and fasten them to a weight, such as a sandbag, so that the weight will lower them when they are wanted again.

A cyclorama may be supported by lines in a similar

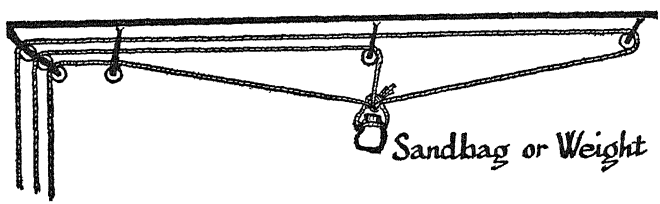


FIG. 45.—METHOD OF DISPOSING OF VACANT LINES.

way. Usually a frame of the proper shape and size must be made. (See Fig. 17, page 107). A similar frame may be used at the bottom of the cyclorama to serve as a weight, and to hold the material stretched.

Lashing Flats

Flats, and most plastic pieces, stand on the floor and support their own weight. The best method of joining flats is to lash them together. A line of cotton rope is fastened by a staple and a knot to the inner edge of the right-hand upright batten. This line should be left just long enough to reach the floor. On the left-hand side, eighteen inches from the top, a "lash cleat" is fastened; and on the right side, about eight feet from the floor, a "brace cleat." "Lash hooks" are fastened to each side, about thirty inches from the floor. The

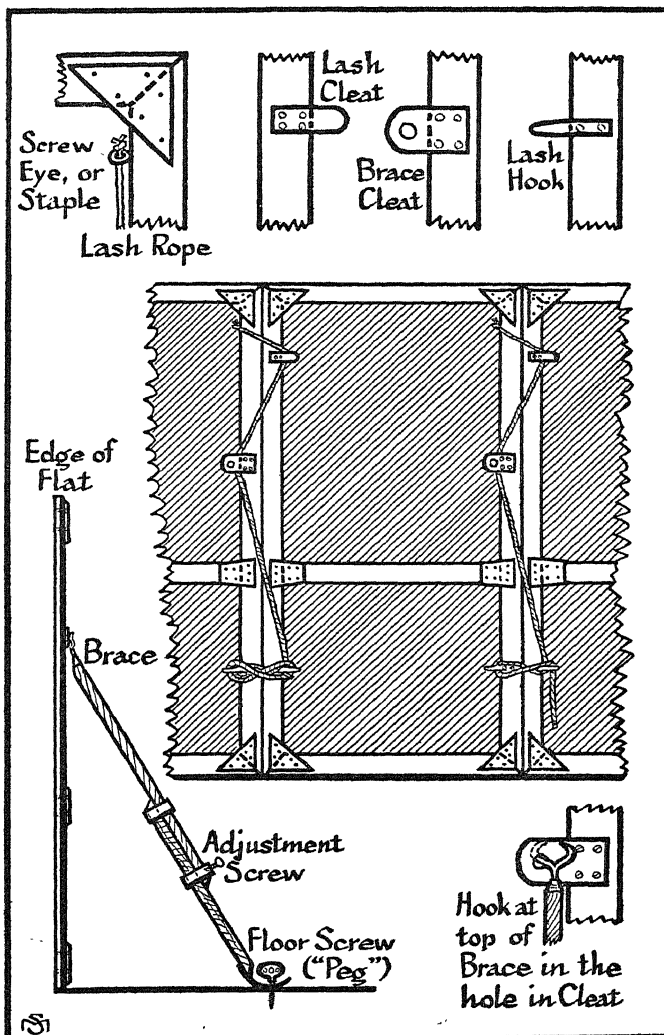


FIG. 46.—METHOD OF LASHING AND BRACING FLATS

lash line is thrown to the right over the lash cleat on the adjacent flat, brought down over the brace cleat of its own flat, to the lash cleat on the right flat, and back to the lash cleat on its own. It is fastened by being twisted two or three times back and forth between the lash cleats. With experience, this process can be done very quickly. In an emergency, nails may be driven into the batten, parallel to the canvas, to serve as cleats. But the real things are so inexpensive and so much more satisfactory that it pays to secure them from some dealer in theatrical hardware.

Bracing Scenery

The difference between lash cleats and brace cleats is that the former are merely pieces of metal that may be screwed onto the batten to take the lash line. The brace cleats are larger and heavier, and have a hole in them through which a stage brace may be passed. A stage brace is a prop to hold the scenery rigid. It consists of two pieces of wood so arranged that they may be extended or contracted, and then solidly clamped together. At the top end is a hook that fits into the brace cleat, and at the bottom a piece of metal that can be fastened to the floor by a hand screw. Braces are especially necessary to hold up single flats that may be used as masks for doors or windows. They may be purchased complete in several different sizes, or the hardware may be secured and the braces made.

It is not essential, of course, that cleats be placed at the exact dimensions given above. But the nonprofessional designer should adopt an arrangement suitable

for his stage, and insist on all cleats being put on according to this arrangement. The lash line should always be at the right of the flat, and then any two flats may be put together and lashed, as there will always be one batten with the line and one with the cleats in the proper places to take the line. If scenery is short, say ten feet or so in height, it is often worth while to use brace cleats instead of lash cleats at the top. They will not be so high but that a brace can be slipped in whenever useful. For the convenience in fastening scenery to the floor, especially for putting in hand screws, the floor of a stage should always be made of soft wood. If this is not the case, sometimes a beam of soft wood can be fastened to the floor along the back of the stage, by one or two lag screws. Braces can then all be carried back to this beam, instead of to the floor, or the lower ends of the braces may be fastened to short lengths of planks, which may be placed wherever necessary, and held to the floor by weights—for instance, by several bricks or stones.

Stage Crew

The handling of the scenery and the changing of the sets is one of the tasks of the stage manager. The stage crew needs rehearsals with the scenery just as much as the actors do with their part of the play. Each member of the crew should have his own duties.

General Principles

There are certain definite methods of procedure which the nonprofessional stage hand should bear in mind. Rugs, furniture, and properties should, as a

rule, be placed on the stage first, and then the set built around them. In the same way, the set should be taken off, then the furniture and properties. It is awkward and time-taking to try to carry heavy pieces through the doorways into sets that are already in place. Each set should be piled in some convenient order ready for putting up, and there should be a definite place for each piece after it is "stacked." It is wasteful to rehandle or to move the pieces to get something accidentally left behind them.

Making Measurements

Measurements for the placing of a set should be made from a spot under the exact center of the proscenium arch. This is called the "pivot point," and in some stages it is marked by a brass plate. Walls are set so many feet back, or so many feet to one side or the other, of the pivot point.

Where several sets are to be used, or where a set is to be rearranged, it is helpful to have certain important corners or points marked on the floor cloth or on the floor itself. Chalk will sometimes do, or better still, colored tapes may be tacked on to indicate the corners. A different color may be used for each set.

The making and the handling of scenery furnishes a never-ending series of interesting problems, involving at times nearly all the arts and nearly all the crafts. Any amateur group which does not plan and make its own scenery is missing some of the pleasure that may be secured from amateur dramatics.

CHAPTER X

COSTUMING

Definition

Many of the things that have been said in the previous chapter about scenery are equally applicable to costuming. In fact, one modern stage designer and producer defines costumes as "scenery worn by the actors." While this definition may mean little to the uninitiated, it should be helpful to those who have read and thought about the theory of stage design. It suggests the need for finding the costume that fits the mood of the play and the character, just as we attempt to find the setting that is fitting. Costuming is only another one of the visual elements that may help act the play. The making of theatrical costumes is a very different problem from that of making costumes for ordinary everyday wear. Again, as we shall see, line and color are the important elements. Fabric, except in so far as it affects line and color, is quite a secondary affair, as is the finish of the costume. It is only the sum total of the effect that counts.[1]

[1] Useful books for the amateur costume designer:
Constance D'Arcy Mackay, *Costumes and Scenery for Amateurs*, (Henry Holt & Co., New York, 1915).
Elizabeth R. Grimball and Rhea Wells, *Costuming a Play*, (The Century Co., New York, 1925).

Aim in Costuming

Every costume should do two things: (1) it should aid the audience to characterize the wearer; and (2) it should help to distinguish him from the other characters.

1. *To Characterize the Person.*—It will succeed in doing the first to the degree that the artist understands and grasps the idea of the character whose costume he is designing. The problem is similar to that of designing a set for a scene. The one main aim is appropriateness. The costume, to be successful, must suggest just the kind of person that the action of the play is going to unfold. Hamlet's "inky suit" should show at a glance the despair of the man, while the bright costumes of the gay court by which he is surrounded help to characterize the other persons in the play. In "The Show-Off," Aubrey Piper is as instantly disclosed by the checked suit in extreme fashion, the bright tie, the flash-imitation stick-pin, the yellow shoes, as he is by the empty laugh and the too facile tongue. As in the case of scenery, this question of appropriateness of costume to character is almost entirely subjective, and no absolute standards can be established. But the nonprofessional designer should constantly keep the idea in mind. He should have the courage to make the costumes he designs seem to him to be the most suitable ones for the characters as he understands them, even though he may be unable to explain in words his reasons for choosing the colors and the lines he decides to use.

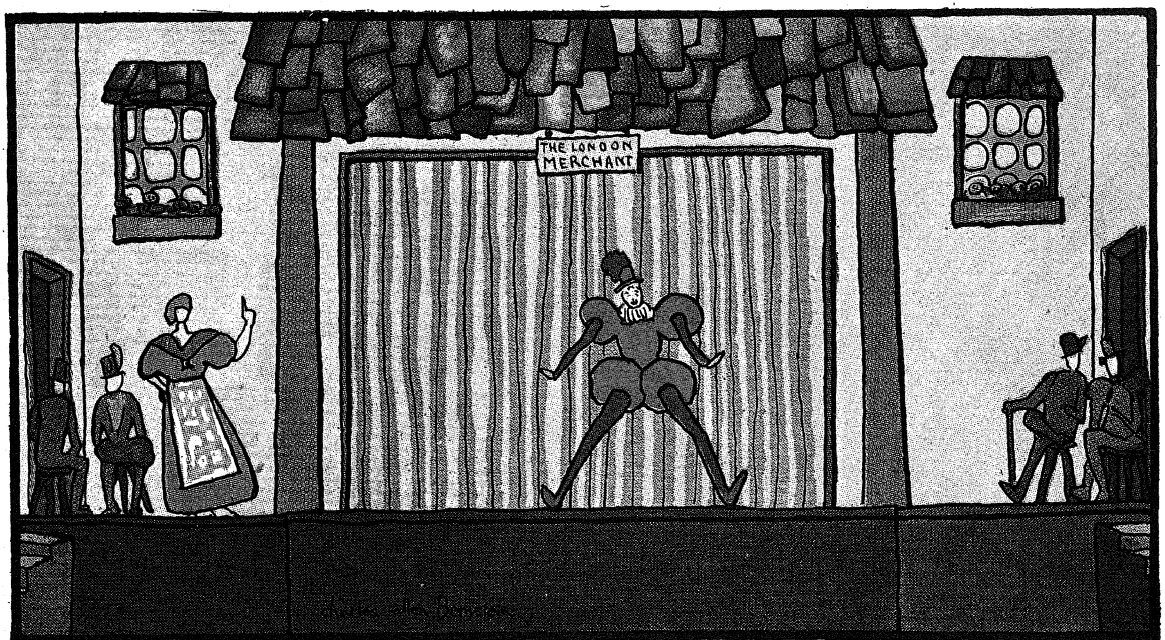


FIG. 16.—PRELIMINARY SKETCH FOR "THE KNIGHT OF THE BURNING PESTLE."

2. *To Distinguish the Characters from One Another.*—The second important aim in costume design is to make the costumes aid in distinguishing the characters one from another. It is not enough that the costume be merely suitable to the character; it must make him stand out of his surroundings. In "Hamlet," for instance, Horatio, as the friend of Hamlet, may have a costume which is in some ways similar to that worn by Hamlet himself. This will help indicate his relationship to Hamlet, and will set him off from the courtiers who are the friends of the king. But his costume must also be sufficiently unlike Hamlet's so that the most casual glance will distinguish the two men from each other. In "The Romancers" there are two old men, Bergamin and Pasquinot, who are constantly on the stage together. They must be kept distinct from one another. There must be a variation of the color and of the lines of their costumes. The coat of one may be longer and fuller than that of the other. One may wear huge cuffs and a striking feather in his hat. One may always carry a stick of some sort. The designer has the same problem that the director has of keeping the characters distinct from one another.

Color in Costume Design

The two elements upon which the artist must mainly depend in his attempts to attain both of these objects are color and line, which have already been discussed (in Chapter IX). Remember that, in general, red, orange, and yellow are considered warm colors: they are more appropriate for the vigorous, passionate char-

acters in a play. The cool colors, blue, green, and violet, usually suggest calmness and quietness. Old characters should probably be costumed in cool colors, as a rule, to suggest that the emotional fires of youth have burned down in them. Remember, also, that neighboring colors suggest harmony and friendship, while complementary colors indicate conflict and struggle. The color wheel will prove very helpful to the nonprofessional designer. An example of thoughtful costume designing may be found in a set of designs made for "The Tempest." In this play there are really three groups of characters: (1) Prospero, his daughter Miranda, and her lover Ferdinand; (2) King Alonso, and his group of courtiers who are shipwrecked upon Prospero's Island; and (3) the comic characters, Stephano, Trinculo, and Caliban. For the first group, cool colors are obviously appropriate, representing the innocence and idyllic calmness of the love story. Prospero, however, must be made severe and dignified; he was dressed in black trimmed with gold-yellow. Miranda's dress was a quiet yellow, and Ferdinand wore a royal blue. So that these costumes should harmonize, both were tipped a little towards green: that is, Miranda's yellow is a slightly green-yellow, and Ferdinand's blue a green-blue. The basic color of the Alonso group was a red-purple: representing both the evil passion of the group and the royalty of the court group. All the courtiers were dressed in varying shades of red and purple. The most prominent ones wore the brightest colors, which were "cooled" by the addition of green for old Gonzalo, the good and aged councilor of

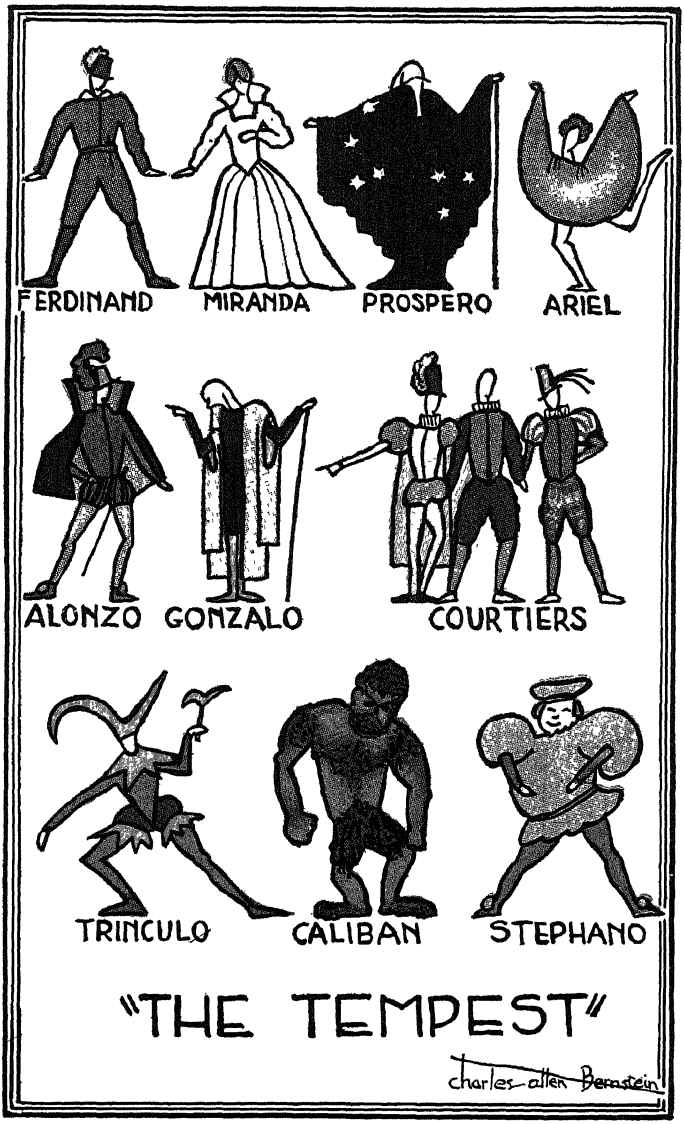


FIG. 47.—COSTUME PLATE FOR "THE TEMPEST."

the king. There was no element of monotony about these costumes, for remember that each color contains in itself an infinite variety. Orange was chosen as the basic color for the comic group: Stephano wore a bright orange costume, Trinculo an orange red and yellow made like the conventional fool's costume, and Caliban an orange brown. Ariel, as a character quite detached from any of the groups, wore varying costumes of different colors, dependent upon the disguise he was for the moment assuming. Thus, color was made to symbolize the characters, and to distinguish them from one another.

Line in Costume Design

Line is the second important element. About all that can be said in this connection is that long straight lines give the effect of dignity and seriousness, sharp curves and circles suggest lightness and comedy, and jagged lines and angles suggest grotesqueness and excitement. In a costume, up and down lines usually give the effect of tallness and slimness; while cross lines add breadth to a figure. Careful designers consider the silhouette of the costumes, and say that each character should have a distinct silhouette as well as a distinct color.

MAKING COSTUME PLATES

The Costume Plate as a Representation of an Idea

Just as a stage model is the best method of designing a setting, so a set of costume plates is the best

method for designing costumes. It is not at all necessary to be an accomplished artist to make a set of plates. Any one who has sufficient ability to select costumes for a play has enough ability to make plates, which are only a graphic representation of ideas. They need not be, and in fact should not be, a set of pictures. They need not be finished drawings in any way. They should be merely a representation of the desired line and color. A beautiful set of drawings may be a very bad costume plate, while a bad set of drawings may be a good costume plate. The actual execution of the design on paper is very unimportant. It is the ideas represented that count.

The Process

There are three steps in the process of costume designing, and they can be learned by the youngest student: (1) sketch the figure on which the costume is to be drawn, (2) draw the outline of the costume, and (3) indicate the colors with paints, just as children fill in sketches for paper dolls. Of course, there will be a preliminary step, which is really the most important one of all, that of visualizing the costumes. Just as in designing scenery, the artist must read and reread the play until he knows the characters. Perhaps he will need to do some studying of costume books, if the play calls for historic costume. But after his ideas become clear to him, he must try to make them clear to others by putting them on paper.

1. *Sketching the Figures.*—It is a simple matter to learn to sketch the figures on which the costumes are

to be drawn. A few lines suffice, and a little practice will enable the designer to sketch the figure in any desired posture. A few elementary rules for figure construction are sometimes helpful. The head should be about one-seventh of the total height of the body.

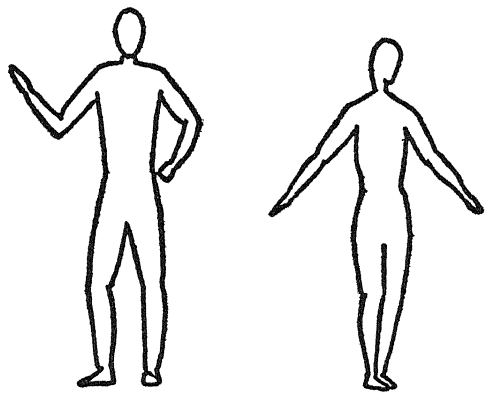


FIG. 48.—FIGURES FOR COSTUME PLATES.
These figures are just about the correct size to draw costumes on; they may be traced or transferred on to drawing paper.

The distance from the shoulder to the waist and the waist to the knees is about equal. The hand normally reaches to a point half way down the thigh. Each extremity may be estimated to be three-quarters of the part next above it; that is, the hand is three-quarters of the forearm, and the forearm three-quarters of the upper arm; the foot is three-quarters of the lower leg, and the lower leg three-quarters of the upper.[2] However, it is not even necessary to be able to draw

[2] See Alon Bement, *Figure Construction* (The Gregg Publishing Company, New York, 1921).

the figures, for they can be traced easily from other sketches or illustrations, and transferred onto drawing paper. A few figures will serve for many costume plates. They had best not be too large. Figures two inches high are sufficiently large. Sketches for an entire play may thus be made on one sheet, as in the frontispiece.

2. *Outlining the Silhouette.*—The next step is to outline the silhouette of the costume. It is important

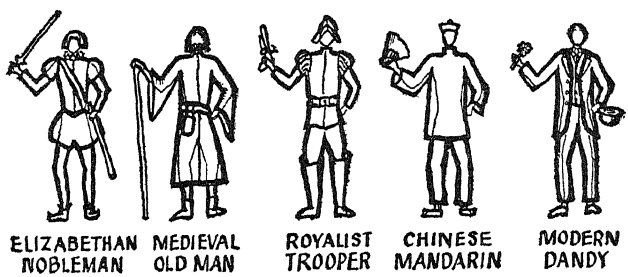


FIG. 49.—DIFFERENT SILHOUETTES OUTLINED ON IDENTICAL FIGURE.

to be certain at this stage that the silhouettes are sufficiently different. For example, in designing a play of Shakespeare's, say "As You Like It" or "The Merchant of Venice," where there are several young men all of whom must be dressed similarly, variation must be secured by such details as sleeves, cloaks, shoes, and so forth. The basic garments must be tights and doublets or jackets of some sort. One may have large puffed sleeves and trunks. Another will wear a longer doublet, and no trunks. Another may have a long flowing sleeve. Still another may wear ornate shoes

that come half way up to his knees. In these ways the necessary variety may be secured. With historic costumes and women's costumes, there is little difficulty in securing individual silhouettes, but the beginner is sometimes puzzled as to what to do about modern men's costumes. The problem is more difficult, but can often be solved by the proper choice of collar and tie, by one character wearing his coat always buttoned, and another leaving his always opened, by the wearing of topcoats and hats when possible, by spectacles, canes, etc. Where there is possibility for little variety of silhouette, color must be depended upon all the more. Of course, it is not always necessary to have this variety; sometimes the play may demand similarity. But where there is similarity it should always be designed, and not merely accidental.

3. *Filling in the Color.*—After the outlines of the costume plates are completed, the colors should be painted in with water colors. As already explained, choice of color will often depend upon the nature of the character, his relationship with other persons in the play, and so on. Always, the thing to remember is that the plate should represent a costume, and should help interpret the play. If it does not do this, it makes very little difference how beautiful it is, or how accurately it represents some historical period, or how cleverly it is drawn.

Need For Simplification

Costumes can often be greatly simplified, just as a good stage set may be. There are many excellent books

of historic costume plates and designs now on the market, and the nonprofessional designer may well study them, and learn as much as he can about historic costume.[8] But he will be unwise slavishly to follow any of them. What he must do is to pick out the typical characteristic of the period he is investigating. For example, he must observe that for many centuries in medieval Europe the basic garments for the men were just two in number, tights covering the legs and thighs, and a jacket of some sort for the upper body. On these two basic garments he may employ his ingenuity to produce an infinite variety of effects. He will do well not to overdress his characters. He should ornament, but not hide, the body. One or two interesting details, properly selected and cleverly applied, will make his designs characteristic of the period. A theatrical costume should not be a display of archæological junk. Its success depends entirely upon its effectiveness.

[8] Some reference books on costume:

Dion C. Calthrop, *English Costume,* (Adam and Charles Black, London, 1906).

F. Hottenroth, *Le Costume chez les peuples anciens et Modernes,* (A. Guerinet, Paris, 1896).

Katherine M. Lester, *Historic Costume,* (The Manual Arts Press, Peoria, Ill., 1925).

Herbert Norris, *Costume and Fashion,* (E. P. Dutton & Co., New York, 1924).

Belle Northup and Anna L. Green, *Historic Costume Plates,* (Teachers College, Columbia University, New York, 1925).

J. R. Planché, *History of British Costume,* (G. Bell & Sons, London, 1900).

Ethel Traphagen, *Costume Design and Illustration,* (John Wiley & Sons, New York, 1918).

Zur Geschichte der Costume (Braun, München). An accurate set of colored costume plates.

Use of Competition

Just as it is interesting to have several artists make stage models for a setting, so is it to have several costume plates made. Sometimes a set of figures may be printed or mimeographed and thus given as a problem to an entire group. In a school, an entire art class may thus be set to work on the designing of costumes for a performance. The illustration facing page 164 shows the work of several artists. Each one was supplied with the set of figures shown in the top line. The play chosen, "The Romancers," is an excellent one to use as an exercise in costume-designing, for the author specifies that "The action takes place anywhere, provided the costumes are pretty." Thus the imagination is freed. Also, notice that there are two young men, and two old men, in the play. Not only must the young men wear young costumes, costumes that distinguish them at a glance from the old men, but they must also be distinguished from one another.

Costume plates, however simply made, will prove invaluable, whether (1) costumes are to be collected and selected, as will usually be the case with modern costumes, or whether (2) they are to be rented from a professional costumer, or whether (3) they are to be made in the shop of the Little Theater or the school group.

SELECTING MODERN COSTUMES

The Value of the Costume Plate

The selecting of modern costumes should not be the haphazard thing it so often is, both on the profes-

FIGURE 50

COSTUME DESIGNS FOR ACT I OF ROSTAND'S "THE ROMANCERS"

The plate on the opposite page shows the possibility of working out costume designs with a class or group. Each student was given a set of figures like that shown in the first line (1). The other sets show four different conceptions of the play, as drawn by four different students. The original figures and costumes were just twice as large as those in the illustration.

A detailed study and comparison of the drawings shows many interesting things about costume designing.

2. This set of medieval costumes would probably have been better had the colors been made brighter, especially in the costumes of Straforel, Percinet and Sylvette. Percinet's costume especially is not gay enough for the young gallant that he is painted by Rostand. Straforel's costume is a little too "spotty," and contains too many colors. It would have been better, perhaps, to have made his doublet red, a different red than was used for the lining of his cloak. Or else the lining of his cloak and his plume might have been made a yellow-orange. Good features of the design are the exaggeration in the hat of Straforel, and his unusually large boots. Notice the variety introduced in the costumes of Bergamin and Pasquinot, by the variation in their sleeves.

3. Notice how the costumes of Percinet and Sylvette, in this set of designs, and in set 4, are "tied together" by the use of green and yellow. The lines of the costume of Percinet are appropriately smart and dashing. The silhouettes of the two old men are probably too similar in outline. Variation might have been introduced by the use of a different cloak for one of them; for example, either a short cloak or else a huge enveloping one. The long fall of lace in Pasquinot's coat is an excellent device, however, and would probably distinguish them from one another on the stage.

4. The bright colors of the costumes of Straforel and Percinet are effective. Pasquinot and Bergamin have costumes of rather similar silhouette, but the large black cuffs on Bergamin's coat help make the costumes distinctive. In this, and in fact in all the designs here shown, the paler colors used in the costumes of the old men are excellent.

5. This is an amusing conception of "The Romancers" in modern dress. It is an example of how varied and how attractive modern costumes can be. Notice especially how the two old men are made distinct, by the long buttoned coat of Bergamin and the short open one of Pasquinot. No student seems to have thought of making one of the old men noticeably more stout than the other, which would have been an excellent thing to do.

FIG. 50.—COSTUME DESIGNS FOR "THE ROMANCERS."

sional and nonprofessional stage. Here is where a costume plate is very useful. The designer can show each actor what he should be, and the actor is usually sufficiently impressed by a drawing to attempt to approach it as closely as possible. When the actor is to provide the costume, it should be brought to the theater and inspected and checked up by some observing person, even though there is no costume plate to check it with. Amateurs must be warned about last minute changes in costume. After the evening dress that the heroine is to wear in the last act has been chosen and approved, it is very annoying to have her appear in "Aunt Jennie's Paris dress which she thought would be so much nicer!" People are often very anxious to lend coats, and sweaters, and hats for amateur performances, but last minute inspirations of this sort are to be discouraged.

The Need for Appropriateness

In modern, as in historic costume, the aim must be for appropriateness. It is a human failing for actors and actresses to want to look their best before their friends, but this desire should give way before the artistic demands of the play. When the heroine and her sister are discovered in the first act so poverty-stricken that they are renting the old family home, illusion is dealt a severe blow if the ladies insist on appearing in newly purchased suits, hats, and furs of the latest style.

Of course, common sense and tact must guide. Selection must be made from what is available. But the

point is that selection is necessary, and its purpose and its value should be made clear to everybody concerned.

RENTING COSTUMES

The Value of the Costume Plate

When renting costumes, the costume plate explains what is wanted and saves time and labor. The plate may be sent to the costumer if costumes must be hired from a distance, or a representative of the group may be armed with it when he is interviewing the customer. As a rule, the plainest costumes, of solid colors, are much the best, and should be insisted upon. Especially to be avoided are the gaudy military uniforms of bright colors and synthetic leather, that obviously are made for the stage and not for service. Everything that is "tricky" and over ornate is bad.

Possibility of Creating Nonexistent Costumes

Even where the costumer does not have what is called for, the costume plate will help in the making of a more satisfactory choice. The costumes represented in the frontispiece were rented from a costumer who had nothing similar to the design, and it was necessary to take eighteenth century "period" costumes. It was possible, however, to approximate the colors, and the garments chosen were of the very plainest sort. The costume of Sganarelle, the leading character, seemed impossible at first. As may be seen, the artist conceived him as a sort of buffoon, a character out of the Italian Comedia del Arte. This is the conception of

Molière, of course, who refers to his "coat of yellow and green" and who says he is a "parrot-doctor." The slapstick action of the play bears out this conception, too. The costume finally worked out consisted of a pair of modern Russian peasant boots, a pair of red Dutch breeches very large and full, and a regular harlequin coat, over which loose red sleeves were fitted similar to those in the design. Thus, although the costume was nonexistent, it was manufactured out of what was at hand, and it was exceedingly effective. A costume plate is often useful in this sort of way.

MAKING COSTUMES

The Use of the Costume Plate

The value of a costume plate when costumes are to be homemade is obvious. It should be the model for the workers who are making the costumes, just as the stage model guides those making the scenery. When the figures are made small, as is suggested above, it is impossible to represent details about the costume, and this is a virtue and not a failing. Details count very little. The costume makers should be freed to get the effects indicated in whatever way seem best to them. The most difficult costume to make is one calling for a coat such as is worn by modern men. Men's costumes of the last two centuries, soldier's and policemen's uniforms, and so forth, should therefore probably be rented unless the service of an experienced tailor is available. Otherwise, the making of costumes is an interesting and not difficult operation, and there

is no reason why Little Theaters and school groups should not have active costume-making squads, just as they have groups working on scenery.

Materials

The material to be used depends on so many things that general advice can be of little value. Some of the cheaper materials commonly used, however, are serge, melton, cashmere, ratine, alpaca, velveteen, felt, and baize. Canton flannel is an excellent substitution for felt, and sateen is often used to represent silk. In general, dull surfaced goods like serge are much better than goods with shiny filled surfaces, like sateen. Cambric lining is a very poor material for costumes, and should be avoided. Heavy unbleached muslin is a very useful material, and entire sets of costumes may be made from it. For Greek and Roman classical costumes, calico, challis, cotton crêpe, and cheesecloth are useful.

Buckram and tarlatan are also very useful materials for the nonprofessional costume maker. They may be used for reënforcing costumes, for collars, cuffs, ruffs, and so forth, and they may be made up into various shapes, such as hats or armor, and covered or painted in the way that is to be presently described.

Need for Consistency in Material

The one important point about the choice of material is that the same grade of material should be used throughout. An entire set of classical costumes may be made of cheesecloth properly cut and dyed, but the

introduction of one real silk costume will kill all the others. A beautiful and satisfactory set of costumes for a Shakespeare play may be made entirely out of unbleached muslin. One real costume, however, of velvet and silk, will spoil the rest. The dramatic art is the art of illusion, and illusion is quickly spoiled by the introduction of one wrong article. The material to be used for costumes, unless they are to be worn many times, is really quite unimportant, so long as this rule of consistency is carefully observed.

Cutting and Sewing

Skill in the cutting and sewing of costumes may be developed by practice, and there should be members of every producing group who are interested in these arts. The ability to cut from a costume plate is not as difficult as may be supposed. There are many good commercial brands of paper patterns on the market, and these are often very useful. Even without them, however, it is possible to succeed in costume making. There are a few principles, and a few basic cuts, that simplify the process immensely.

In cutting, it is usually necessary to make two similar pieces, a right and a left. The common method of doing this is to cut the material doubled, so that two pieces of identical size are made at the one cutting. When the material used has a right and a wrong side (which, however, is not the case with many of the materials recommended above), be sure that two right sides, or two wrong sides, come together so that a right and a left will be made.

Trousers, whether they are to be tight Elizabethan trunks to be worn over long hose, or whether they are to be long loose sailor trousers, should be made in four pieces, as illustrated below. Two pieces make the back, and two the front. The outside seams should be made first, thus putting one front and one back together. Then, starting at the crotch, the inside seam

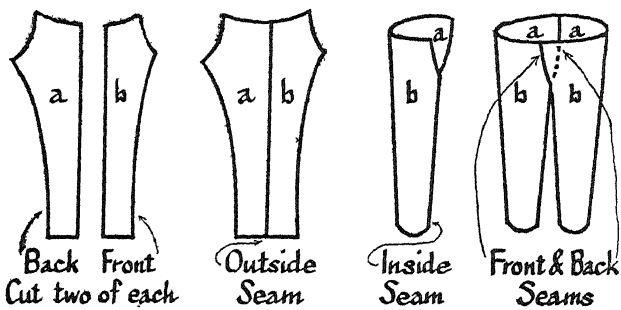


FIG. 51.—TROUSERS.

should be made on each leg. Then, starting again at the crotch, and putting the two pieces together, the front and the back may be sewed up to make the top. With this general idea in mind, the clever designer can make any sort of a garment desired for the legs. The material can be cut long or short, tight or full. It may be gathered at the bottom of the legs and at the waist, or it may be left straight. It may be left open part way down the sides, or up the legs. But the main point is to use four pieces, and to put them together in the order given above.

Skirts may be of two varieties: straight, or circular. A straight skirt consists of a rectangular piece of ma-

terial, long enough to give the distance around the bottom. The edges of the rectangle are sewed together, to make a cylinder, which is gathered or plaited at the top for the waist. There need usually be but one up and down seam; for if the material is wide enough for

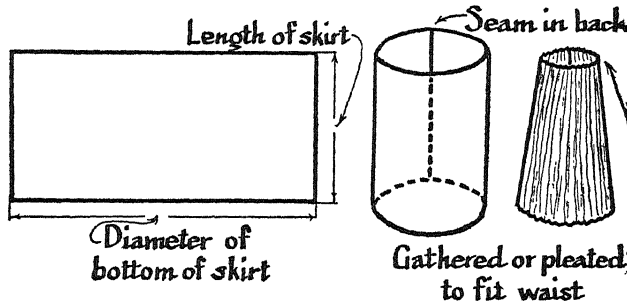


FIG. 52.—STRAIGHT SKIRT.

the length of the skirt, a single cut crosswise of the material will make a piece that is long enough to go around the body.

Circular skirts are more difficult. They may be made of a single piece, as shown in the illustration on page 172, or they may be gored, that is, made of several pieces fastened together. The most simple sort of gored circular skirt is illustrated on page 172. It consists of five pieces; a front piece which must be cut separately (a), and four other pieces (b, b, c, c), all of which may be cut at once from a double piece of material. Material having a pattern that must be kept right side up cannot be cut in this manner, as the design in two of the pieces (c, c), would come out upside down. Three measurements are essential for the skirt:

the waist measurement, the length, and the distance around the bottom hem.

The basic pattern for a sleeve is also shown on page 173. To insure a good easy fit, it is better to

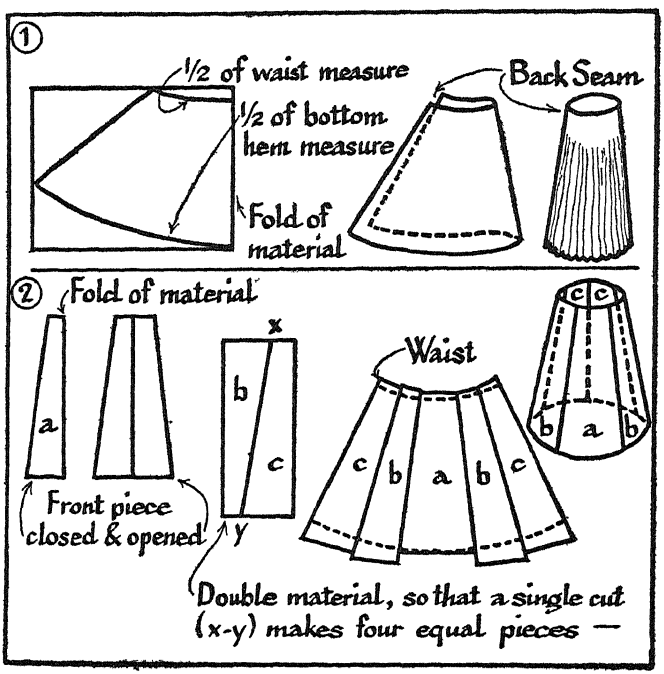


FIG. 53.—CIRCULAR SKIRTS.
(1) Single piece. (2) Gored.

have the sleeve a little larger than the armhole into which it is to fit.

The upper parts of a woman's dress, or a man's tunic, may be made just as dolls' dresses usually are:

that is, of a doubled piece of material, with the neck hole cut in the center of the fold. One half of the material then hangs down behind, and one half in front. Often, a kimono sleeve can be left, and the remainder of the sleeve need be but a cylinder sewed on

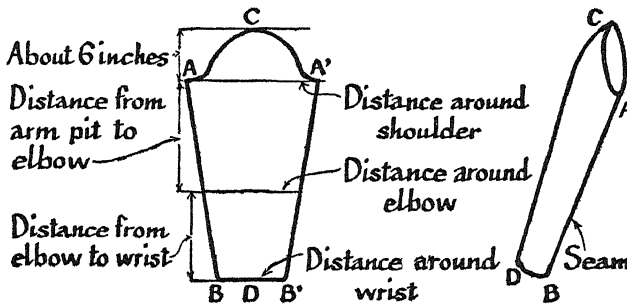


FIG. 54.—SLEEVE.

to the kimono sleeve. An upper garment, made this way (see illustration) may be opened in the back or front, sewed up the sides either shaped or unshaped, left long or short, or treated in any way that the design demands.

Costume makers will soon build up the necessary ability to make whatever is required. They must decide what few measurements are necessary, and learn to work from them. One-half inch is usually plenty to allow for seams. Seams that are smaller at the outer edge than at the stitching should be notched, so that the material will turn back, and lie smooth and even. A sewing machine might well be in the workshop of every dramatic organization.

Much time is sometimes wasted in turning hidden hems, and making fine seams, that affect the value of

the costume not at all. This does not mean that work need be careless. But a theatrical costume need not fit like a street suit, and it need not be finished like a costume for general wear. A person need not be an accomplished tailor in order to be able to make excellent and satisfactory costumes. Boldness and clever-

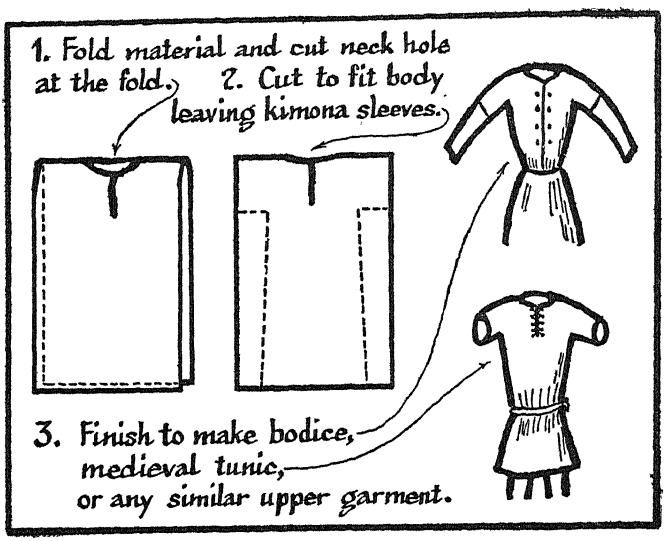


FIG. 55.—METHODS OF MAKING UPPER GARMENT.

ness in getting effects is the best qualification for a costume maker.

Sometimes white goods may be used for making the costumes, which may be dyed afterwards. The costumes for "The Tempest," the designs for which are shown in Figure 47, were all made out of unbleached muslin, and afterwards dyed to match the costume

plate. Costumes to be dyed must be cut sufficiently large to allow for the shrinking effect of dyeing. There are certain advantages in such a proceeding. Undyed material is much easier and much pleasanter to cut and to sew; and, when the garment is put together before dyeing there is no danger of the parts not properly matching, as is sometimes the case in amateur dyeing.

Dyeing

What is true of the cutting and sewing of costumes is also true of the dyeing: smooth, even, professional work is entirely unnecessary for the stage. In fact, materials that are dyed so that they are rough and uneven often give better effects under stage lights, as they have the roughness of fine fabrics. The lights give them life. There are all sorts of dyes available, but probably the safest and the easiest to use are some of the commoner commercial dyes that are sold all over the country. They give good colors, as a rule, and each package gives specific directions. It is wise to follow these directions explicitly. For example, the garment or the material to be dyed should always be soaked with water before being placed in the dye. Some setting agent, salt, or vinegar, or whatever is directed, should always be used. Sometimes, even if colored material is used to make the costumes for a scene, it is wise to dip them all in a weak solution of the same dye to give them artistic unity. A set of calico dresses and shirts for southern mountaineers, for example, might well all be dipped in a weak solution of a

red-brown color, to give them all the earthy, worn appearance demanded by the play. This weak solution should not change any of the original colors, but should give a universal tint to all of the costumes. The results of theatrical dyeing must always be judged from the distance. It is not how the costume looks to the other characters that counts, but how it appears to the audience.

Painting

The painting of costumes is an interesting field for experimentation, also. All sorts of decorations and designs may be made with paint. The paint used is similar to that used for making scenery: that is, it is made with hot water, glue or mucilage, and dry pigment. Aluminum or gilt radiator paint may be used for silver or gold color. The material to be painted may be placed on a flat surface, like an old table covered with paper, and the design painted on with a stiff brush. The paint should be rubbed into the cloth as much as possible. Collars and cuffs and borders may be painted on Elizabethan garments, for example, or the entire surface of a tunic may be covered with a pattern which will give the effect of a fine brocaded surface. Effects, to be of any value, must be large. Finicky and exact work is invisible and useless.

Miscellaneous Articles

Certain necessary articles are unusually difficult to make, and task to the limit the inventiveness of the nonprofessional costumer.

1. *Tights.*—Tights are an important part of men's costumes for many centuries, and they are exceedingly difficult to manufacture. They may be made by putting feet in underwear, or by getting large sizes and taking in the leg along the leg seam, but the results are rarely satisfactory. It is much better to purchase the real article. Undyed tights can be purchased at reasonable prices from theatrical costumers, and a number of pairs might well be in the costume closet of every group. The white ones may be dyed light colors; the light colors may be dyed a darker color for the next use, and so on. A satisfactory collection may be soon built up. Medieval characters such as shepherds, farmers, etc., may often have bare legs, or they may have dark trousers or natural-colored coarse underwear cross-gartered or bound to the knee.

2. *Shoes.*—Shoes sometimes are a problem, too. Heavy stockings, cut, or laced, or rolled to suit the occasion, with an inner sole of cardboard, may sometimes be used for medieval cloth shoes. Sandals may be made with inner soles and lacing; or old shoes, with the heels removed, may be cut into the desired shape. Felt, or other heavy material, may be cut and sewed to represent any sort of shoe. The shoes of ladies and upper-class women do not represent so much of a problem, for they seem to have changed very little in the past three hundred years.

3. *Hats.*—Hats may be made of buckram, and covered with cloth or felt, or painted.

4. *Armor.*—Armor is one of the most difficult problems of the nonprofessional costumer. Many

times he can dodge the problem by dressing the characters in surcoats, or in tabards, or in some other long overall garment. Breastplates, or other pieces, may be made of buckram, however, and silvered or gilded with paint. Pieces of tin or other metal or metal pan cleaners, may be sewed on tunics, and painted. Knitted material, like a sweater, may be silvered to make excellent chain mail. Helmets may be made out of buckram, or out of old felt hats, shaped and painted. Armor can always be contrived, if the costumer has the ingenuity to make the proper shape.

5. *Cloaks.*—Long cloaks of some sort are very useful for giving a finish to armor, or to other costumes, that do not seem to be entirely satisfactory. An assortment of cloaks and capes is a useful addition to any wardrobe.

The Wardrobe Closet

Just as scenery should be saved to be rebuilt and reused, costumes should be saved. A growing costume wardrobe is a useful thing for the nonprofessional group to build up. Costumes may be remade, and redyed to fit the new designs. The problem of designing and making costumes that will be a harmonious part of the whole artistic and dramatic scheme of the play is an interesting one. The most satisfactory results will be attained by broad, simple effects.

CHAPTER XI

MAKE-UP

Purposes of Make-up

Make-up may be considered as an extension of costuming. Its purpose is to make the face and head assume the desired characteristics, in the same way that costuming does the body. It has the added purpose, on the modern stage, of overcoming the effects of the strong lights that are used. The natural color of the face is killed by the glare of stage lighting, and the face becomes dull and ghastly.

Varieties of Make-up

It is useful, though perhaps not strictly true, to consider that there are two varieties of make-up: (1) straight, and (2) character. In a straight make-up, a person retains, more or less, his own characteristics. That is, a young man plays the part of a young man, or a young woman plays a young woman. The chief purpose of a straight make-up, therefore, is to overcome the glare of the lights, and to increase beauty. Character make-up requires the actor to change the appearance of his face and head; a young man plays the part of an old man, or a girl assumes a Chinese

or negro part. Character make-ups require much more skill and experience. In general, however, the processes are similar.

Like all the other processes of the dramatic art, successful make-up grows out of experience only. There are hundreds of details, and many useful tricks and devices, which can be learned from observation of experienced actors. There are two or three excellent books on the art of make-up, which should be in the library of every dramatic organization.[1] Usually there are one or two persons in every group who are especially interested in the art, who might well be appointed supervising experts. Each actor, however, should learn enough of the process to be able to make himself up for his own parts. The general principles and the fundamental operations are not difficult to grasp.

Visualizing the Make-up

The first thing to be done is to visualize the desired result: the actor must see how he wishes to appear. Often he must be governed by the costume plate, which will call for a character of a certain sort (see frontispiece.) Perhaps the general director, or the art director, will suggest the character's appearance in the play. Perhaps some real person will be the model. With a historical character, portraits may be secured

[1] Helena Chalmers, *The Art of Make-up,* (D. Appleton & Co., New York, 1925). James Young, *Making-up,* (Witmark & Sons, New York, 1905). Cavendish Morton, *The Art of Theatrical Make-up,* (Adam & Charles Black, London, 1909).

and carefully studied. In any case, in some way, the actor must arrive at a decision. His problem, then, is to make up to match the conception.

Materials

The materials commonly used are as follows:

1. *Cold Cream.*—Ordinary theatrical cold cream is cheaper and better for make-up purposes than the common toilet article. Some actors use vaseline or olive oil in place of cold cream.

2. *Grease Paint.*—Many varieties of excellent grease paint are now on the market. Grease paints come in all possible hues of flesh colors, and are used to give the face the proper color tone. If an actor is to play a part many times, he should attempt to secure a stick that is just the color he wishes. For example, a young lady playing a straight part might use the color known as "Juvenile," while a young man playing an aged character would use "Sallow Old Man." Unfortunately, makers of grease paint have no consistent system of marking or of lettering their colors, so that experimentation is sometimes necessary. With a little experience, it is perfectly possible to mix colors to secure the right hue. For instance, "Juvenile" may be mixed with "Carmine" to give a healthy out-of-doors sunburned appearance; or "Sallow Old Man" may be mixed with "Carmine" and "White" to give a good color for middle age. Thus, of all the twenty or so flesh colors available, only three or four are absolutely necessary for practically any make-up. A good selection for a "Make-up Box" is "Juvenile," "Middle

Age," and "Sallow Old Age," or three equivalent colors.

3. *Powders.*—Theatrical powders come in many shades, corresponding in color to grease-paint colors. The product of any one manufacturer usually follows in name or number the scheme used to label his grease paints.

4. *Liners.*—Liners are smaller sticks of grease paints, in colors that are not normally used to give color tone to the face, such as black, white, gray, blue, and brown. They are used to make lines on the face, such as wrinkles, eyebrows, etc. A complete assortment of liners is useful. Ordinary "eyebrow" pencils are merely black or brown liners.

5. *Lip Sticks.*—Lip sticks are small sticks of grease paint for coloring the lips.

6. *Rouge.*—Rouge is of two varieties: moist and dry. The moist comes in small jars; the dry is merely red powder. Instead of moist rouge, many actors prefer a red liner. Dry rouge is often very useful, however, and should be available.

7. *Crêpe Hair and Spirit Gum.*—These are the materials out of which stage mustaches and whiskers are made. Crêpe hair is a preparation of wool, woven into a rope. It is sold by the yard. It comes in a great variety of colors, ranging from snow white through grays, black, browns, and blondes, to the most brilliant red. Spirit gum is a combination of gum arabic and ether, with which the crêpe hair is fastened to the face. It comes in small bottles, and is best when it is fresh.

8. *Cloths.*—A large supply of clean cloths is an

important tool in making-up. Cloths are needed to cover costumes during the process, and they are necessary for wiping off the make-up. Clean cheesecloth is very satisfactory.

Many other articles such as "nose putty," tooth enamel, mascara, and so forth, will be found on the list of any manufacturer of grease paints, but those listed are enough for most purposes. If the actor is to make himself up, he needs a well lighted mirror. This is best if fixed to the wall, although it is useful to have it movable, so that it can be set at varying angles. A small hand mirror is also of great aid. If the lights in the make-up room are capable of being changed just as the lights on the stage are to be changed, the actor can see just how he will look under the stage lights. This is an exceedingly difficult thing to judge, for lights affect grease paints just as they do other colors. Most grease paints seem much redder under ordinary white light than they do under the colored lights of the stage.

Whatever the make-up is to be, whether it is to be straight or character, male or female, simple or complicated, there is a certain common process, and this definite process should usually be followed. The development of skill depends on the operation being done over and over again, until this common process becomes familiar. The following are the usual steps:

The Make-up Process

1. *Preparing the Face for Make-up.*—Rub the skin lightly with cold cream, wipe the cream off the surface,

powder the surface, and wipe the powder off. The cream fills the pores of the skin, and also makes it easier to get off the grease paint afterwards. The powder aids in drying the skin. Too much cold cream must not be used: many an amateur make-up is spoiled before it is started because the actor soaks his face in cold cream. The face should be left perfectly smooth and dry. This step is merely to prepare the surface for the real painting: it corresponds to the priming coat in scene painting!

2. *Laying on the Ground Tone of Color.*—With a grease stick of the desired color, make marks on the face across the forehead, down the nose, on the cheeks and on the neck. Rub this grease paint with the tips of the fingers until it is evenly distributed over all the surface of the face that is to be exposed. If a beard is to be put on, the surface of the face that it is to cover should be left untouched by grease paint or by cold cream and powder. The importance of spreading the grease paint evenly cannot be overestimated, and some practice is needed before this can be done quickly. A good make-up depends upon this step. If the surface is messy, it is impossible to produce a good make-up; the only remedy is to wipe the surface clean, and start over again. Be sure that the entire surface that is to be exposed is painted. For instance, paint should extend well up into the roots of the hair, and over the ears. The under surface of the chin must not be neglected. The neck is another crucial place; it is very disturbing to see a white girlish neck when a bearded old gentleman turns around to sit down!

3. *Using Rouge.*—Cheeks should next be colored with wet rouge or with carmine grease paint. A spot should be made with the rouge or the stick, and the color should then be worked out over the proper surface with the fingers. Along the edges it should blend into the grease paint of the ground tone. The amount of color, and the exact placing of it, depends largely upon the character of the make-up. An old man of a certain sort may have practically no color in his cheeks, while for a rosy-faced old gentleman a large amount must be used. Observation of people with good natural color will teach the actor just where the color should appear. The face may be made to appear narrower or wider by placing the spots nearer together or farther apart. Do not make the spot of rouge too large, and do not overdo with the color. In general, cheek color is placed higher on women than it is on men: that is, for women the color will usually start high up, almost at the eye, and will rarely extend below the level of the nostril. For men, the color may be lower: it may start at a place half way between the eye and the lower level of the nose, and extend almost down to the jawbone, and indeed sometimes even a little along the jaw. Women making up as men, or men as women, should remember this observation. Rouge may be used by a skillful make-up man in several other ways; some actors practice using a spot on the chin, or under the nostril, or at the inner corner of the eye. The amateur will find all these usages described in books on make-up; however, he will do well to practice such usages sparingly. The spot on the inner

corner of the eye may give the eye brilliancy and life, as is claimed, but it may also make the eyes appear crossed. Moderation is the best guard against unintentional grotesqueness in make-up.

4. *Lining.*—The most difficult thing to learn about make-up is how to put on the lines that change the character of the face, and give it age and expression. Here again, practice is essential, and observation of the faces of people is the necessary preliminary to practice. The lines are made with the grease paints of dark colors, called liners. The lines cannot be put on directly with the lining stick, however. Some actors melt a small amount of the stick in a pan, and make the lines with the warm liquid and a fine camel's-hair brush. A much easier method, and one that is about as satisfactory, is to use a pointed splinter of wood, such as an ordinary wooden toothpick. One end of the toothpick should be stuck into the liner so that some of the grease paint adheres to it, and with this paint the line is drawn. It is desirable to be able to make the sort of line desired, be it heavy or light, curved or straight; and the beginner may spend some time practicing on the back of his hand or on his arm. When he feels that he has control over the toothpick, he is ready to proceed with the lining of his face. The color of the liner must then be determined. Heavy lines will probably be black or brown. A fine network of wrinkles may demand gray. For lining eyes and eyebrows, it is a general custom to use blue or purple for blondes, and brown for brunettes.

For straight young make-ups, only the eyes will need

to be lined. The actor will first draw eyebrows on top of his own, unless his own are naturally so heavy that they do not need to be reënforced. If he wishes to move his eyebrows, as will be the case where he is to make up as a Chinaman, he can hide his own brows by rubbing the hair with wet soap, allowing it to dry, and then covering the surface with grease paint the color of his facial ground tone. Japanese actors have an interesting trick of tying a narrow tape, about half an inch wide, over their own eyebrows. The wig hides the knot at the back of the head, and the tape can be painted to match the rest of the face. After the eyebrows have been satisfactorily adjusted, it is necessary to outline the eye. Otherwise, the eye appears small and expressionless from a distance. With a toothpick covered with grease paint, a line may be drawn under the eye, as close to it as possible, from the inner corner to a point just beyond the outer corner. During this process the eye had better be kept open, looking upwards. Then, with the eyes closed, a similar line should be drawn along the edge of the eyelid; this line is to emphasize the eyelashes. It should meet the line drawn under the eye just beyond the outer corner. No other lines are necessary for a young character.

For middle age, or old age, however, it is necessary to draw wrinkles. The best method is to screw up the face, so that it falls into wrinkles, and then to draw the wrinkles so formed. They will thus be made in the natural places, in the places where they will really be when that particular face grows old! The actor may well attempt to assume an expression suitable to the

character he is playing: if he is to be a cheerful old man, he should feel happy, smile, and wrinkle up his face; if he is to be sour, he should attempt an unhappy appearance. Then, with his paint, he should try to make this appearance permanent. This is the scientific background for the rather hazy advice that one must inwardly assume the character before he can successfully make up for it.

Observation will show the actor that there are certain basic wrinkles that are practically universal. The first of these are the wrinkles across the forehead. They

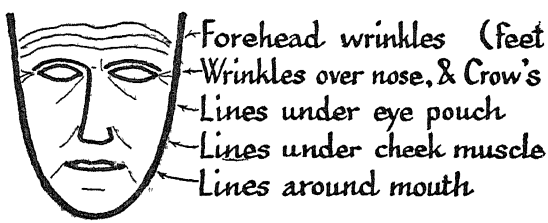


FIG. 56.—BASIC WRINKLES FOR OLD AGE

are usually three in number, and they dip down slightly in the center of head over the nose. Usually there is a short line over the bridge of the nose, and one or two small vertical wrinkles over the top of the nose, where it runs into the forehead. The next common set of wrinkles is at the outer corner of the eyes, where there is a fine set of lines radiating from the corner. These are popularly known as "crow's-feet." A third line is usually found at the inner corner of the eye, from which it runs down into the cheek for one or one and one-half inches. This line is formed by the falling of

the skin under the eye into a pouch. A fourth line, or set of lines, runs from the lower corners of the nose down towards the mouth; it is caused by the sagging of the cheek muscle. Finally, there will be lines from the corners of the mouth, and crosswise between the lower lip and the chin, caused by the weakening of the muscles of the lips. In extreme old age, the entire face may become covered with a network of lines. The flesh at the temples and in the cheeks will sink, too, and this sunken appearance may be secured by painting those places gray. The gray should not be too dark, and it should be shaded off into the ground tone of the face just as rouge would be. Wrinkles may be made to appear deeper by the use of white lines alongside the black ones. Thus, if the actor wishes to show a deeply furrowed forehead, he may sketch in the wrinkles with black, and then just above each wrinkle draw a corresponding line with white grease paint.

Two principles, if kept in mind, will greatly simplify the matter of painting wrinkles, and light and shade. The first is that parts painted darker than the prevailing ground tone will appear depressed, and parts painted lighter will appear elevated. Thus, an actor wishing to make sunken cheeks, or sunken temples, will work a little black or gray into the desired place when he is putting on the ground tone. If, on the other hand, he wishes to make his cheek bones, or his nose, more prominent, he will work in a little white. The second principle is that in middle age the muscles of the face sag, so that middle age and young old-age may be indicated by underlining the muscles; but in

old old-age, the muscles disappear altogether, so that it is best portrayed by indicating the outline of the skull. As temple and cheeks are made to appear sunken by being darkened, so the corners of the forehead, the cheek bones, and the jawbone should be made to stand out, skull-like, by being made lighter.

The neck and the hands must not be neglected; they should be colored and wrinkled as well as the face.

5. *Penciling the Lips.*—The next step is to color the lips. For a youthful make-up an ordinary lip stick, or a carmine liner, will give the proper tone. Color should, as a rule, be placed at the center of the lips and worked outwards in each direction. It should not be carried clear to the corners of the mouth, or the mouth is likely to appear unnaturally wide. In old age, the lips lose their color, so for an old make-up it is necessary to tone down the lips with blue or gray. This should not be neglected, for red lips on an old man are very noticeable, especially if they are seen through venerable whiskers.

6. *Putting on the Hair.*—Hair for the face may be purchased already made up into mustaches or whiskers on wire or gauze frames, and such a device is useful if the same make-up is to be used night after night, or if very quick changes of make-up are necessary. It is not very difficult to make a false mustache by attaching crêpe hair to a piece of gauze. As a rule, however, the nonprofessional actor will find that the most satisfactory sort of false hair will be that fastened directly to the face. Usually it appears much more natural, if it is properly made; and it doesn't pay

to go to the expense or the labor of a ready-made beard for a few performances.

Hair on the face, whenever it doesn't match the color of that on the head, is usually lighter; therefore, whenever it is impossible to match the wig or the hair, crêpe hair of a lighter shade should be chosen. Two or three shades lighter is better than one shade darker. The big, black, obviously false mustaches, that mark the wrong kinds of amateur dramatics, are usually caused by using hair that is too dark. The rope of crêpe hair should be pulled out at one end, and worked out to a proper thinness with the fingers or a comb. The kinks can usually be combed out without difficulty; but if absolute straightness is desired, the crêpe hair can be soaked in water, after it is pulled out, and then be allowed to dry for several hours.

For a mustache, the hair should be cut or pulled off the rope, properly shaped, and then cut in the center and fastened to the lip in two separate pieces. The mustache should always be made of two pieces, no matter how small it is. This allows a little triangle of flesh to be left on the upper lip, between the two parts, which is always observable in nature. Besides, it makes speaking in a mustache much easier, as the lip is not constricted as it would be by the single band of hair. A very small amount of hair is needed. Most nonprofessional actors tend to use too much, which looks very unnatural. The upper lip, on which the hair is to be placed, should be covered with the spirit gum, which should be allowed a moment to grow tacky, before the hair is placed on it. Then the hair

should be pressed against the lip for a moment with the hand or with a piece of cloth. If too much hair is used, the surplus can be pulled off after the gum is dried. The mustache can then be pulled out into any desired shape, or trimmed to fit the fancy just as real hair might be.

Hair on the other part of the face should be put on in the same manner. A full beard is best made with six pieces: the two parts of the mustache already described, two side pieces, a throat piece, and a chin piece. The two side pieces are placed on the cheeks, and should be long enough to come down and mingle with the hair from the chin; say, five or six inches long. They may be placed high to join the side hair of the wig, or of the head, or they may be started lower, leaving a shaved place above. These side pieces come just in front of the ears, but a little line of flesh should always be left between them and the ears. Hair never grows clear back to the ears. The throat piece is gummed under the chin, with the hair coming forward. This is an important piece which must never be omitted. The unnatural appearance of some amateur beards is often due to the fact that they appear to be pasted on to the front of the face; in a natural full beard there is always hair growing *under* the chin, unless that part is shaved. The chin piece is fastened to the front of the chin, stretching downward from the lower lip. Its length and heaviness will usually determine the fullness of the beard. All these pieces, after they are thoroughly fastened on, may be worked together and pulled into the desired shape. For a rough

shaggy beard, appropriate for a peasant or a mountaineer, the hair may be left rough and ragged, as torn from the rope. For a more cultivated person, the same sort of manufactured beard may be trimmed with scissors, just as a real one would be by a barber. No matter how small the full beard is, it should be made with all these six pieces. And even a goatee, unless it is a very tiny one that sprouts only from the lower lip, should always be made of two pieces: a throat piece, and a chin piece.

Crêpe hair is also useful to make eyebrows, especially for old men, or old women, who need gray shaggy brows. A small piece of hair should be pulled to the proper shape, and fastened on with gum. The spot on to which it is to be fastened must be left clean of grease or paint, or else the gum will not stick to the face.

In general, the most important thing to remember is not to use too much hair. Usually the outline of the chin can be seen through any beard, no matter how full it is. If the false hair appears too thick and heavy to be natural, the actor should pull off tufts of hair until the mustache or beard does seem natural. The rule is to stick the hair on to the surfaces where it would naturally grow, and then to pull and cut the hair, to thin and trim it, until it seems right.

7. *Powder.*—The final step is to put a coat of powder over the entire make-up. This powder should match in color the ground tone. It should be applied generously with a powder puff, and the surplus should be brushed off gently, so that the lines of the make-up

will not be blurred. A useful tool for this purpose is a baby's brush with very soft bristles. If the cheeks do not seem to be red enough after this coat of powder, they can be colored with dry rouge. This completes the normal make-up.

If a wig is to be used, it may be slipped on before the final powdering. A partially bald wig must be put on before the second step, however, so that the ground tone of grease paint may be carried up on to the wig, to cover the place where it meets the forehead. The hair may be successfully whitened with powder; orris root, obtainable at any drugstore, is probably the best powder for this purpose.

To remove the make-up, rub cold cream over the face, and wipe with a clean cloth. The false hair should be pulled off first, and the gum that remains may be dissolved with alcohol.

If the nonprofessional actor becomes thoroughly familiar with this make-up process, he will find that it is a relatively simple matter to make up for any sort of character.

Dry Make-up

It is not always necessary, however, to use grease paint. For a straight character, a dry make-up is often sufficient. This is a make-up consisting merely of powder, rouge, and penciling of the eyes and lips. That is, it is a make-up without grease paint. The process is that described above, with the omission of the second step, the laying of the ground tone of grease paint.

Some Suggestions

There are certain general suggestions that the non-professional actor may well keep in mind.

Observation is the basis of all good make-up. If a young man wishes to make up as an old one, he can do no better than to study the faces of old men. He can notice how the beard grows, and where the lines come. He must also study himself, and see how the idea can be best expressed on his own face. He will probably see real people whom he would never dare to imitate, because a successful imitation would look too unreal. As in all the other departments of dramatic art, the selection of proper details is the basis of success.

Queer make-ups, involving black eyes, knocked-out teeth, and other such irregularities, should be used sparingly. They are very rarely necessary, and still more rarely truly comical.

If a number of amateurs are to be made up—say, a group of a hundred children for a pageant—a make-up team is a useful device. One person can be appointed to make eyebrows, another to rouge cheeks, and still a third to redden lips. The children can go from one to another, and a rapid and effective system can be worked out. In general, however, in a case of this sort make-up should be used sparingly, unless it is made necessary by glaring lights which would cause faces to appear white and ghastly. It is only under the glare of real stage lighting, or on the assumption of a true character, that make-up finds its place.

Finally, if strange make-ups are to be used, they

should be used until every one becomes familiar with them. A boy who is wearing a beard and an old man's make-up cannot be expected to act well if he is wearing it for the first time on the night of the performance. A good comedy make-up with which the other characters are not familiar may make them laugh during the performance. Boys wearing long wigs, as cavaliers, or boys playing women's parts, must have an opportunity to become at home in their make-up. In make-up, as in all other branches of dramatics, foresight and practice are necessary to success.

CHAPTER XII

PROPERTIES

Definition

The position of the property man and his assistants in the general play-producing organization has been previously discussed (see Chapter II, page 19), but so important are the properties, and those who provide and handle them, that further discussion is necessary. Properties are defined by dictionaries as "all the adjuncts of a play except the painted scenery and the costumes of the actors." Formerly, in periods that took their play production a little less scientifically than ours does, costumes, too, were included among the properties. And custom still includes some articles that might also be classified as costumes—such articles as canes, umbrellas, revolvers, swords, fans, letters, and so forth, that are used in the action of the play. Aside from these things, properties usually include furniture, pictures and ornaments, noise machines, "effects" such as snow or rain storms, and many other things that seem to fall to the property man merely because they are not the particular function of any other member of the producing force. The property man is, therefore, a busy and important person. It would seem fitting, perhaps, to give him a more imposing title, such as master (or mistress) of properties. In some organiza-

tions he is called the property manager. Whatever his title, it can never adequately describe all the assorted duties that usually fall upon him and his assistants. A well-organized and competent property department is a necessary adjunct to play production.

Importance of Properties in Rehearsal

It is exceedingly important that properties be introduced into rehearsals as early as possible. Some person, either the property man or the director, or both, should read the play through and list all the properties that are to be needed. Reprints of old prompt-books usually contain lists of necessary articles. If the actual properties cannot be secured much before the performance, other articles may be used in rehearsal. A stick may thus serve for a cane, or an umbrella, or a fishing rod, or a gun, or any other such property. A piece of paper may be used for money, or a dish, or jewelry, or a hat. The important thing is that some physical property be used wherever one is called for. Otherwise, the nonprofessional actor is likely to forget, or to make some false move. Properties which are introduced at the last moment for the first time are sources of danger. In "The Bishop's Candlesticks," the Bishop comes into his home, greets his family, and takes a seat at the table for supper. In one performance, the Bishop did all these things nonchalantly with his hat still on his head. Fortunately, the day was saved by the boy who played his sister; he had the presence of mind to go up to the Bishop, sitting quietly at supper in his home, remove his hat, and hang it on the

hook that had been provided for it. The audience, it is to be hoped, charged the ungentlemanly action to mere absent-mindedness on the part of the noble Bishop. Such occurrences are entirely unnecessary. The Bishop should have worn some sort of hat at every rehearsal, even if it had been only a paper hat.

Furniture

Furniture, in a play that is properly planned according to modern ideas, will be chosen by the artist who designs the scenery. Where furniture, rugs, pictures, and ornaments are selected from available material, it should be his duty to make the selection. The property man is thus relieved of this responsibility.[4] Whenever the property man does find that he has to do the selecting, he should do it with a complete conception of the play in mind. He should know and follow the modern idea of the play as an artistic unity. The more he knows about the theory of stage design (Chapter X) and scenery (Chapter XI) the better his selections are likely to be.

Making Properties

Many times, the property man will find that he must make properties, and here manual skill will stand him in good stead. He may have to devise torches by fastening electric torchlights at the ends of sticks, and covering the bulbs with colored papers. Lanterns may be made of sheet tin, cut to proper shapes, and folded to inclose an electric torch or bulb. Stage "food" is often required. Bread, covered with hot water just

before it is carried on to the stage, is a common device. The bread may be broken or cut to almost any desired shape, from potatoes to meat, colored with paint, and made to steam with hot water. For stage soups or drinks, a fine grain, like birdseed, may be used. It, too, can be made to appear just off the stove by the use of boiling water. Real food and drink are usually unnecessary for a play. The nonprofessional actor had much better pretend to eat and to drink than really to do so. And the property food should be used in as many rehearsals as possible.

Stage Tricks

Sometimes the property man may be called upon to devise a stage trick of some sort. In a medieval ballad-play, called "King Herod and the Cock," the climax of the play comes where the King says that it is just as likely that Christ is to be born as it is that the roasted cock lying before him in a dish will stand up and crow. The cock does so! The trick was performed in this way: During the play a table is carried in by servants and set before the King. It appears to be an ordinary table, but in reality it is a magician's table: a small boy is concealed in a box-like arrangement close under the table top. The cock is carried in separately by another servant, on a golden platter—made by gilding a tin plate—and placed on the table. The cock is made of cloth, shaped like an ordinary bird, but so arranged that a coat of feathers, and head and a tail, which have been folded under him, appear when he is turned over. Three tiny hooks lie on the table, and a string fastened

to each one runs through a hole in the table to the boy beneath. The servant who "carves" the fowl secretly fastens these hooks to it. At the proper moment the boy crows and pulls the strings, one of which moves the cock's head back and forth. In this manner the cock appears to come to life, to the great amazement of King Herod and the audience. A similar trick is called for in "The Tempest." A banquet is set before King Alonso and his followers, who have been wandering, hungry and thirsty, over the mysterious island. At a certain time the food must be made to disappear, while Ariel appears and lectures the courtiers on their evil ways. Again, a trick table was used. This table had a top made of heavy wrapping paper, on which was spread a "delicious banquet" of glass fruit. A boxlike arrangement held Ariel just under this paper top: the back was opened so Ariel could crawl in just before the table was carried on by "strange shapes." The King and his friends, after some conversation about the possible source of the banquet, approach it doubtfully. At that moment there is a terrific crash of thunder, a flash of lightning, and then an instant of darkness. Ariel bursts through the top of the table, and the "delicious banquet" vanishes by dropping into the box. The dismayed courtiers fall back before the accusations of Ariel; at the end of his speech there is more thunder and lightning, and he himself disappears by falling into the boxlike table, which is instantly carried off by the "strange shapes." Stage tricks of this sort may call for great ingenuity from the property man and his crew.

Fire

To obtain an illusion of fire, a pile of logs, with their centers cut away, may be built up—on andirons, if it is to be used in a fireplace, or on a baseboard if it is to be an open fire. A deep amber-colored electric light and a small fan may be placed at the bottom of the hollow center of the pile. Over the fan should be placed a piece of wire netting, to which narrow strips of white, red, and orange crêpe de Chine or georgette should be attached. These strips will catch the breeze and the light, and they will flutter above the tops of the log to create an excellent illusion. It was a device of this sort that was so effective and terrifying in Bernhardt's performance of the death scene in "Jeanne d'Arc." Of course, the mere light will suffice where the effect of flames is not desired.

Use of Electric Fans

Electric fans are useful in many other ways. By their use a flag may be made to flutter, or curtains may wave in the breeze that is sent in at a window.

Snow

White confetti, by being thrown into an electric fan, may be driven into a window, or across an open window or door, to give the effect of snowfall. An excellent blizzard was created at a performance of "Seven Keys to Baldpate" at the New Rochelle High School. Two large electric fans were mounted on the back of the scenery at one side of the large French doors which

served as the outside entrance to the room in which the scene takes place. Two boys fed white crêpe paper confetti very regularly into these fans. The confetti was driven across the doorway at an angle and also caused to swirl in falling. As the doors contain no glass, they were covered with navy blue veiling so as to prevent the flakes from entering the room. Every time the doors were opened the wind was made to howl. For snow that is supposed to be on the clothes, wet salt is probably better than confetti. It may be shaken off by the actors as they come out of the storm.

Wind

Noises are another source of labor for the property man. A wind machine is a very useful property. The commonest form of wind machine is a large wooden cylinder, shown in the illustration on page 204, with slats around its circumference. It should be about two feet in diameter, at the very least, and a larger diameter gives a better effect. The cylinder must be fastened to a support, and supplied with a crank so that it can be turned rapidly. A piece of cloth, heavy silk or canvas, must be arranged so that it can be stretched tightly over the cylinder while it is revolved. The greater the pressure on the cloth, and the more rapidly the cylinder is turned, the louder is the wind. Another form of wind machine, which requires less storage space, but is as a rule less satisfactory, is one made of two smaller, smooth cylinders, fastened about four or five feet apart on a board. One of the cylinders must have a handle by which it may be revolved.

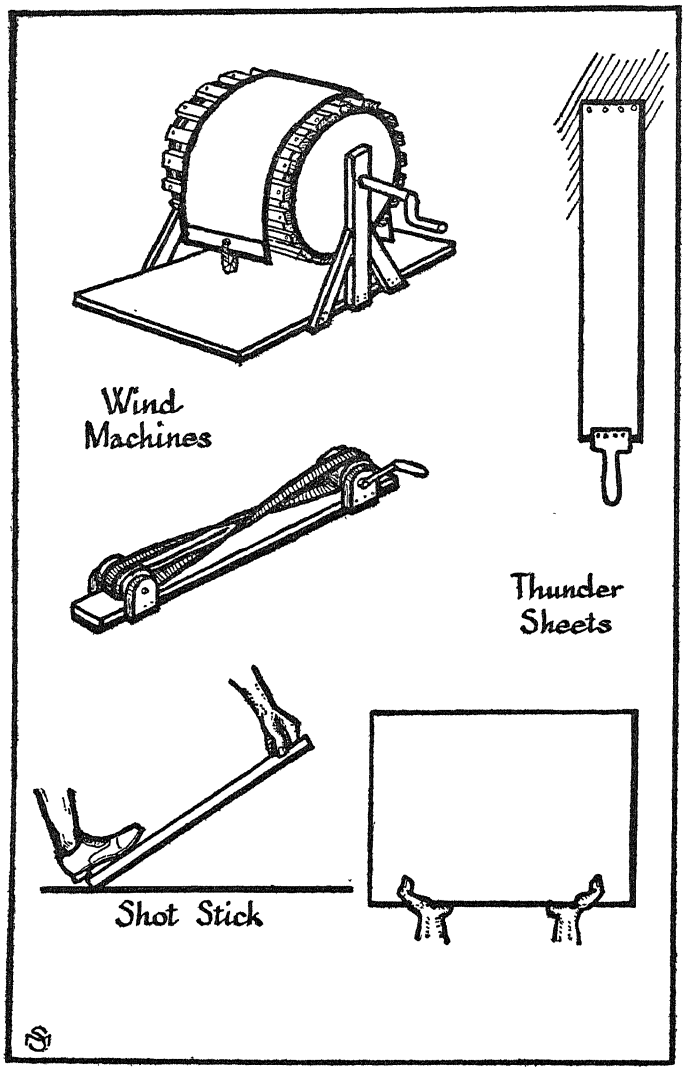


FIG. 57.—NOISE DEVICES.

Between the cylinders is stretched a belt of cloth, twisted in the middle so that it will cross and rub together. Oftentimes, in professional performances, when a great storm is to be represented, all these mechanical devices are found to be insufficient, and it is found necessary to reënforce the machines by noises made by the stage hands, who whistle and imitate the wind with their voices. One clever high-school boy, disappointed in not being able to borrow the wind machine that had been promised to him by the local theater, and wandering dejectedly about the school building, came upon the janitor sweeping the floor with a vacuum cleaner, and immediately commandeered the instrument, which gave an excellent substitute performance!

Thunder

Thunder is best imitated by a thunder drum, but this is an exceedingly expensive instrument, and one which can hardly be homemade. The old device of a sheet of tin will usually suffice. A large sheet, two or three feet wide and eight or nine feet long, is easiest to use. One end should be fastened against a wall, and the other end, which should be four or five feet from the floor, may be taken and shaken gently. A much smaller piece, however, say two by three feet in size, will usually serve. The "thunder man" takes this piece in both hands, holding it by the long edge with his hands, thumbs up, about fifteen inches apart. Practice will enable him to shake it slowly to make a distant peal, and vigorously to make a louder peal. He

can learn to make a great crash by striking it on his knee as he shakes it vigorously.

Rain

Rain may be made by dropping shot or dried peas on the head of a drum, or on some other object that will sound, as a thin piece of wood or a sheet of tin. The "rain man" must keep taking the shot up in handfuls and letting it fall back on his drum or sounder. Sometimes a good effect is secured by putting the shot or peas in a tin box and shaking the box properly. A "rain box" of this sort is a device of great antiquity.

Hoof Beats

Horses' hoof beats may be imitated by using drum sticks on a sounding box of some sort. However, the traditional method, also of considerable antiquity, is to use two halves of an empty coconut shell. The performer holds one in each hand, and beats with the ends on a smooth board. The long association of this device with cheap melodrama of the "ten, twenty, thirty" style has made it a noise that is to be used with great discretion. It is usually better to allow the audience to imagine the hero riding up to the door—except when a comedy effect is desired.

Crashes

Crashes off the stage, such as a burglar falling through a window, are usually made by a "crash bag"; that is, a heavy canvas bag containing broken glass and tin. Such objects may also be placed in a wooden box,

which may be allowed to drop. It is dangerous to have broken glass around loose; all crashes should be carefully provided for.

Shots

When shots are fired, and real blanks are not to be used, either on or off the stage, an excellent effect may be secured by striking the floor of the stage with a flat piece of wood. The stick should be about three or four feet long and two or three inches wide. One end should be placed under the heel, and the other end held in the hand two feet or so from the floor. By pressing down with the foot, and releasing suddenly the end that is held in the hand, a sharp, shotlike sound can be made. A common method of imitating the sound of distant musketry is to beat a heavy cushion, such as an automobile seat.

Need for Originality

These are, perhaps, all the sounds that are commonly demanded. But the property man must be ready at any and all times to devise methods of creating sounds never before made on the stage. When "The Hairy Ape" was performed first on Broadway, the property man was at a loss for a long time as to how to imitate the sound of the shoveling of coal into the furnaces of a ship, which is demanded throughout an entire scene. After experimenting, he finally hit upon a certain method of shaking iron chains, which gave the exact effect. No coal was ever used in the scene. But the stokers, stripped to the waist, with empty shovels

went through the motions of feeding coal to the flaming furnaces, the doors of which were constantly opening and closing, making the scene alternately bright and dim. And the "coal man" continued to rattle his chains off stage. From the audience the illusion was excellent. There are no set ways of securing noise effects. Anything that gives the proper sound is legitimate.

Handling Properties

More almost than any other member of the producing force, the property man needs a sense of order and arrangement. He must know where everything is at every moment during the performance, and where everything should be. It is customary to have a property closet, or a property box, at a certain definite place just off stage, to which actors can go to get necessary properties just as they are about to make their entrances. Sometimes the property man will have to send an assistant to an entrance to hand an actor a property. He must not neglect to see that the property is taken away from the actor again when he is finished with it, and restored to the property closet. He must, of course, have a complete list of everything that is to be used. Sometimes he may have to work out a system of marking properties to indicate the act in which they are to be used. Colored chalks or colored tapes may prove useful. Above everything else, the property man must be certain that articles are in their proper places. In a serious little play called "The Cottage on the Moor," an ancient pistol is one of the important properties. A grandfather says to his little

grandson, "Get the pistol *down* from the shelf." In one performance, the obedient boy went to the closet, but to his dismay the pistol was not high up on the top shelf, as it had been in rehearsals. After a search, he bent over and picked it off the bottom shelf, near the floor. The effect was comical, and the audience laughed. The actors were confused, and the performance went from bad to worse. The slight slip on the part of the property man who had placed the articles in the closet really ruined the performance.

The property man must be ingenious, and he must remember that there may be a difference between dramatic properties and real articles. In a pseudo-Chinese play, "The Turtle Dove," one of the properties called for is a Chinese newspaper or book. One property man once spent several days, and traveled a long distance, before he finally secured a copy of a real Chinese newspaper. Another property man, collecting his material for another performance of the same play, took a long piece of paper, two sticks, a paint brush and a bottle of black ink, and made in half an hour an excellent Chinese scrollbook, which in the play was much more effective and comical than the real newspaper. Perhaps the perseverance of the first property man, and his insistence on the real article, is as much to be admired as the cleverness of the second; but there is a moral to the story, nevertheless.

The opportunity that the property man has in using his ingenuity in securing and handling the properties for each new play makes his work ever new and fascinating.

CHAPTER XIII

LIGHTING

The Importance of Lighting

It is entirely proper that lighting should be the technical element of play production that has been left for final consideration. Not only was it the last element to be developed historically, but we are only just beginning to realize that it is perhaps most important of all, as it is more capable of fusing the play into an artistic and unified design than is any other single element. Its important bearing on the success and effectiveness of the scenery, costuming, make-up, and even upon the action of the play, can hardly be overestimated. As Irving Pichel says, in light "we have the only single agency in the theater that can work with all the other agencies binding them together—that can reveal with the dramatist, paint with the designer, and act with the actors." It is rare that light is used by nonprofessional producing groups to the extent to which it should be. This wonderful agency that we are only beginning to understand deserves the most careful study.

The Purposes of Stage Lighting

Stage lighting has certain definite purposes, of which the four most generally accepted are the following:[1]

[1] The following purposes are from Pichel's *Modern Theaters.*

1. To illuminate the stage and the actors;

2. To suggest the light effects in nature, and thus to state the hour, season, and weather;

3. To help paint the scenery by heightening the color values and by adding light and shade; and

4. To help act the play by symbolizing its meaning and reënforcing its psychology.

The Development of Stage Lighting

These purposes are stated more or less in the order in which they came to be recognized. Artificial lighting for play production is a quite recent invention. In most parts of Europe, plays were given out of doors in the light of the sun until three hundred years ago, and light effects were unnecessary and impossible. Then, hesitatingly, drama crept indoors. This change began in England during the time of Shakespeare: in his young manhood all the theaters were outdoor theaters, but by the time he retired there were two or three regular indoor theaters in London, notably the famous Blackfriars, in which he had an interest. In these indoor theaters, artificial lighting became a necessity; the stage was flooded with the light of as many candles as possible so that the audience could see the actors. For many generations this was the main purpose of the lighting. Gradually, perhaps, some attempt was made to regulate the amount of light according to the time of day in which the action was supposed to be taking

He states a fifth purpose, namely, to lend "relief to the actors and the plastic elements of the scene" (page 68), but this appears to be a part of 3, and moreover it seems unnecessary to have this purpose consciously in mind to produce good lighting.

place, by increasing or decreasing the number of candles. With the introduction of oil, then gas, and finally electricity, this could be done better and better. But it is only within our own day that we are beginning to assume an absolute control over this element. The last two purposes have been but recently recognized. We are only beginning to see what can be done on the stage with light.

The Four Purposes Illustrated

In general, the four purposes will reënforce one another. They may all be illustrated by almost any example of good stage lighting. For instance, in Hampden's production of "Cyrano de Bergerac," all four purposes may be noticed in the final scene. The light illuminates the stage and old Cyrano, who sits dying in his chair in the garden; the yellow light of the late afternoon gradually fades to the blue of twilight, while a leaf drifts down occasionally from a tree to indicate that the year as well as the day is drawing to a close; the dying light, streaming in from one side of the stage, helps paint the scene, and casts increasing shadows of the tree, of the wall that crosses the back of the stage, and of gaunt old Cyrano himself; and finally, the fading light helps symbolize the action by showing the darkness—the shadow of death—that creeps closer to Cyrano throughout the play, and that engulfs him at its close.

A knowledge of these purposes should be held constantly in mind by the artist who arranges the lighting for any scene.

Lighting Devices

The devices by which these purposes must be attained will probably be selected from among the following:

1. *Footlights.*—Footlights are lights that are fixed along the front edge of the stage, so arranged that they

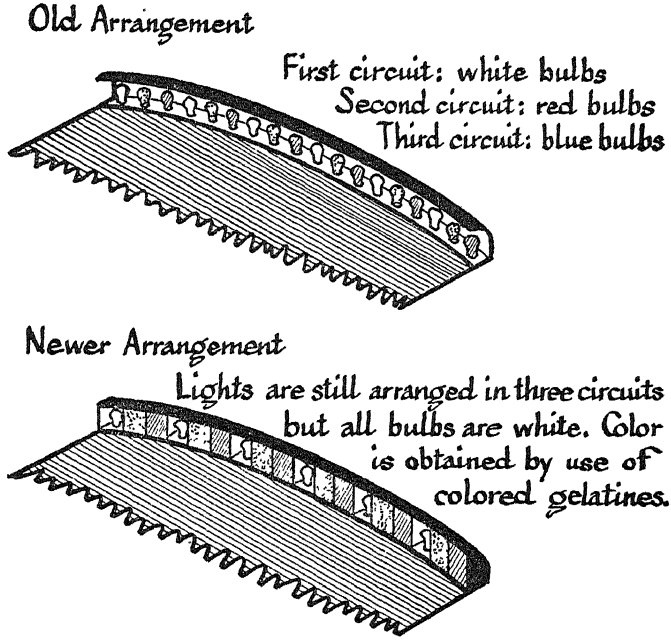


FIG. 58.—FOOTLIGHTS.

are shielded from the audience and that they cast light back over the stage. Usually they are wired in circuits: that is, in a three-circuit plan which is the most common one, every third light will be wired to be controlled by one switch, a second third by another switch,

and the remainder by still another. Thus, three colors may be used, say red, blue, and white, by putting bulbs of a single color in each of the circuits. A still more recent scheme consists of having the lights wired in circuits, but in using all white bulbs; color being secured by the use of colored gelatine medium, held in front of each bulb by a sliding frame. The advantage of this scheme is that it avoids the use of colored bulbs, which are often unsatisfactory, because of the difficulty of securing good colors in which to dip the bulbs, and because the heat of the lights often causes the color to peel off; moreover, it allows the use of almost any color by merely changing the gelatines in the slides. For some plays, green footlights may be useful instead of blue, or amber instead of red. The gelatine necessary to make the change will cost but a few cents, and it will be the work of a few minutes only to make the slides, while a complete set of new bulbs of an unusual color may be difficult or impossible to secure. (See pages 227-229 for further description of gelatines and slides.)

During the past few years there have been many arguments about the value of footlights. Some authorities have insisted that they are entirely unnecessary and undesirable in the modern theater. They point out, quite truly, that footlights originated in the days of candles and oil lamps, when it was impossible to throw light any distance, and therefore it was necessary to bring the lights as near to the actors as possible; with our recently developed powerful lights that can throw almost any distance, footlights are quite unnecessary, they say. And it is true that excellent lighting

effects can now be secured without the aid of footlights. Nevertheless, properly used, footlights are very effective, and nonprofessional groups will probably be wise in having them. They throw light up from the edge of the stage at an angle that no other device can, and for certain effects they are almost indispensable. One of the very latest ideas is to place small spotlights (see page 217 *seq.*) among the footlights to secure greater control of light from that direction. On the whole, footlights seem to be coming back into favor.

2. *Border Lights.*—Border lights are strips of bulbs backed by reflectors very similar to footlights, that are

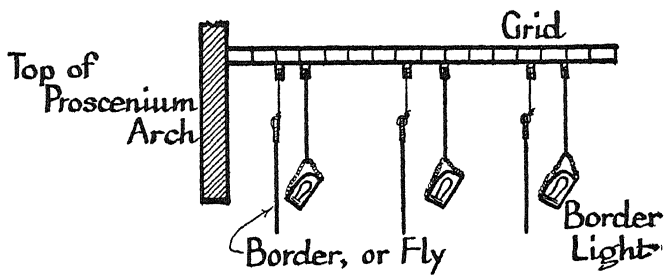


FIG. 59.—BORDER LIGHTS.

hung from the ceiling or the grid, parallel to the footlights. They throw light down upon the stage from overhead. Three sets of border lights are common, although some small theaters have but two, and some larger ones have four or five. Usually each border light must be protected from the sight of the audience by a "fly" or a border, as in the illustration above. Like footlights, they are usually wired in three circuits,

and may give combinations of colored lights by the use of either dipped bulbs or gelatine slides. When ceilings are placed on interior sets, border lights cannot be used, with the possible exception of the front one. Some years ago, when electricity was first adapted to theatrical lighting, foot and border lights were used almost entirely for every play. The combination does light the stage evenly and brightly. But changed ideas and newer devices have made the time-honored combination of "foots and borders" less and less important.

3. *Proscenium-Arch Lights.*—One of these new devices, which like most new things is in reality quite old, is an arrangement of lights around the edges of the proscenium arch. These lights throw back on to the stage. They may be strip lights, similar to those used for foots or borders, or they may be spotlights clamped to a frame of some sort. Just at present, this device is in great favor. Most new theaters have some arrangement whereby a great battery of lights can be massed around the edge of the proscenium. Sometimes it is a mere frame of piping to which lights can be clamped; sometimes it is an elaborate movable bridge, on which several electricians may be stationed during the performance, to reset lights, to change the colors, to work lanterns, and so forth. The extremely effective lighting of the production by the New York Theater Guild of "The Devil's Disciple" was produced in this way, by the use of several dozen spotlights around the edge of the proscenium arch. Each of these spotlights had its own function in the play. One threw a spot of light on a chair, another illuminated a

door, and still another was so set that it brought out an actor's face clearly at some important situation, and so on. Some of these lights were used for a few moments only, or perhaps even a few seconds only, during the entire play. Others were used throughout a scene.

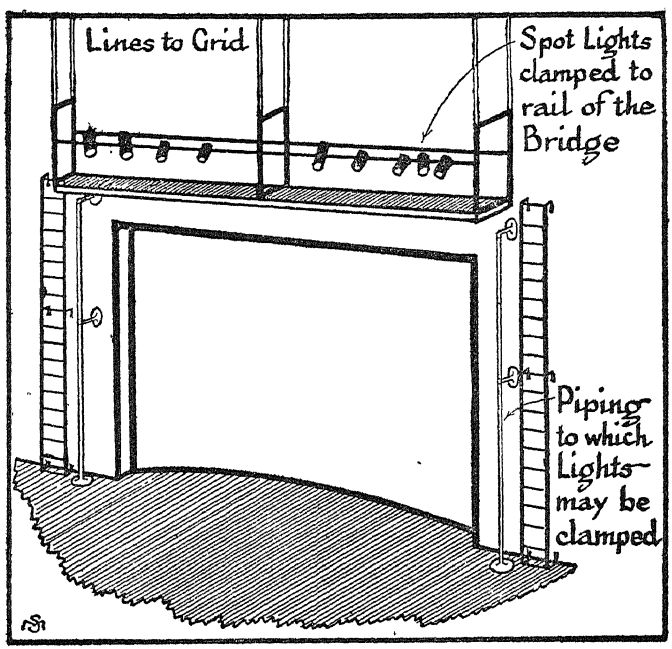


FIG. 60.—MOVABLE LIGHT BRIDGE.

4. *Side Lights Cast by Flood Lights or Spotlights on Standards.*—Lights on standards, so arranged that they can be set at any height or at any angle, are also very useful. They may be used to throw light in through a door or window, or through any other open-

ing in the scenery. The illustration below will show the main differences between flood and spot lights. A spotlight throws, as the name indicates, a "spot"; its light is concentrated by a lens at its opening. A flood light has a wider opening and no lens, and hence throws a more diffuse light over a larger area.

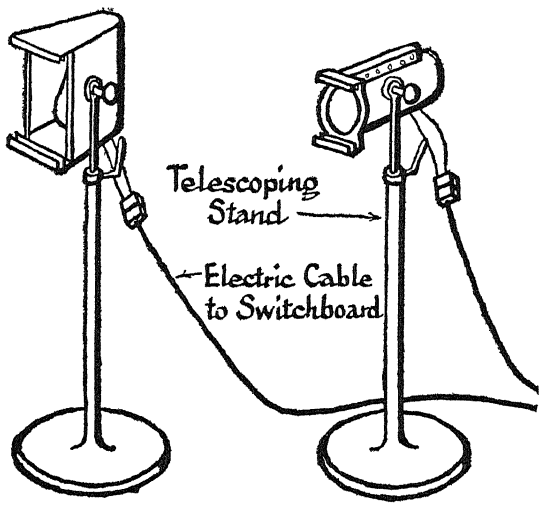


FIG. 61.—FLOOD LIGHT AND SPOTLIGHT.

By removing the lens at the front of a spotlight it is for all practical purposes converted into a flood. Modern lights of this sort contain large bulbs, usually of two hundred and fifty, five hundred, or one thousand watts. They may be made to cast a light of any color by the use of gelatine slides. Most spot and flood lights have a series of grooves at the front to hold the slides.

5. *Auditorium Lights.*—The commonest auditorium lights are spotlights from the front of the balconies. They may be made to cast a single small spot to pick out some person or object on the stage, or they may be made to reënforce the lights on the stage by casting a steady enveloping light. The later use is almost the only one now common, for the old custom of following a player with a sharply focused spot has fortunately almost disappeared. In some of the most recently built theaters, these auditorium lights are built into the front of the balcony, covered with automatic shutters, and controlled entirely from back stage, so that the audience is never conscious of them. Such a device is a valuable addition to the lighting equipment.

6. *Incidental Lights That Are Part of the Set.*—Incidental lights may be on the stage itself; for instance, candles, torches, fireplaces, lanterns, chandeliers, etc. They often play a very important part in the lighting scheme. In the production of Tolstoy's "Redemption," in which John Barrymore played the leading part, nearly every critic in New York mentioned the striking light effect obtained in one scene. One character was talking to another in a dilapidated Russian inn. The scene was practically dark, except for the bearded face of one of the characters, telling his fearful story to the one startled auditor. This effect was obtained with an ordinary candle, which stood on the table behind which the two men sat. A piece of tin, made into a reflector, was fastened to the candlestick, and threw the light back into their faces. The effectiveness of the lighting need not depend upon

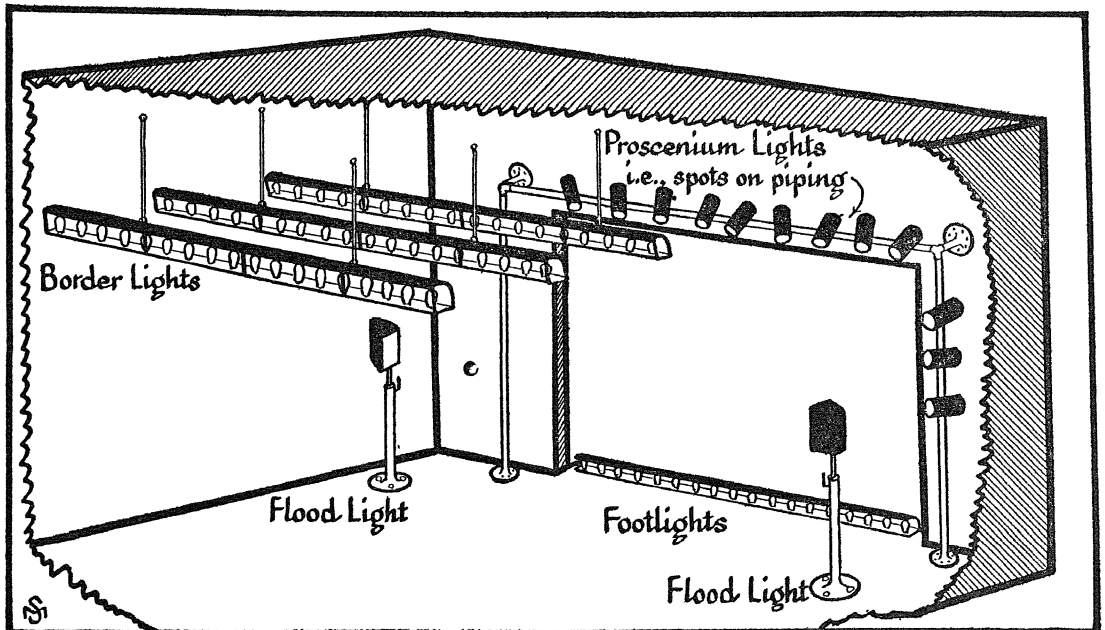


FIG. 62.—COMMON LIGHTING DEVICES ARRANGED ON A STAGE.

elaborate mechanism, as is shown by this clever use of the humble candle.

Three Fundamental Devices

The beginner in the art of stage lighting need not be discouraged by any apparent complication of the

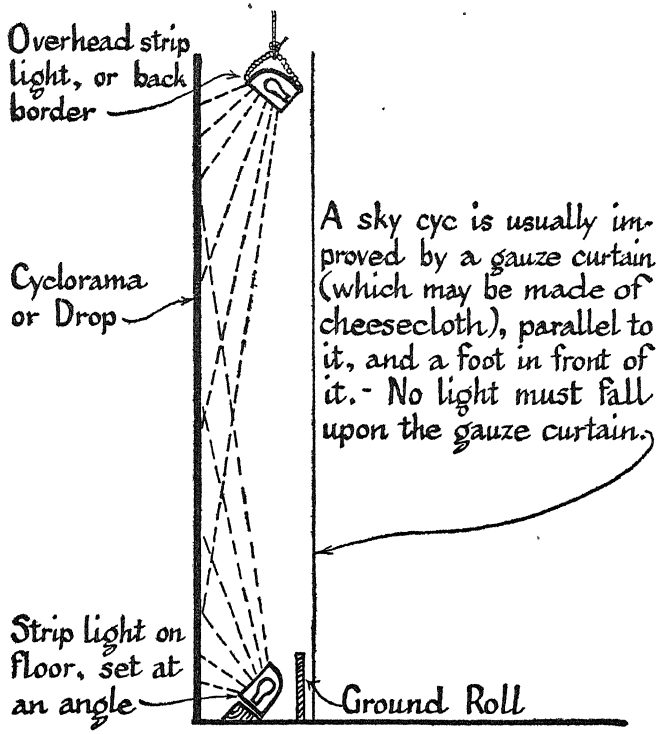


FIG. 63.—METHOD OF LIGHTING A CYCLORAMA OR BACK DROP.

above scheme. A brief study of the lights mentioned or, better yet, careful observation in a well-equipped

theater, will show him that there are, after all, only three different lighting devices—except for the fixtures for incidental lighting—that are common on the modern stage.

1. *Strip Light.*—The first of these is the strip light: that is, lights arranged alongside of one another in a row, and furnished with a reflector. These strip lights are usually made in sections, by manufacturers making Little Theater equipment, and they may be of almost any length. Eight or ten feet is a satisfactory length. Strips of this sort can be used for footlights when they are properly placed along the front of the stage, or as border lights when they are suspended at the proper angle from above, or as proscenium-arch lights when they are fastened above or to one side of the proscenium arch. The strip light is the light used to illuminate a cyclorama. A special cyclorama reflector strip, which throws light in an even flood over the entire surface of a drop, is an exceedingly useful unit; but in its absence, an ordinary strip light on the floor throwing light upwards over the cyclorama, and another strip light overhead throwing light downward, will light it successfully.

2. *Spotlight.*—The second device is the spotlight. It may be used to throw light from the edge of the proscenium, from the auditorium, or from the side of the stage when used on a standard. In fact, there is no use to which the spotlight does not adapt itself. It may be clamped to the grid or to the ceiling of the stage, and so usurp the place of the border; it may be placed along the front of the stage, where it becomes

a footlight; or it may be placed on the floor in a fireplace, where it becomes an incidental light.

3. *Flood Light.*—The flood light is the third and last variety—and, as has been said above, when the spotlight takes off its lens it is practically a flood, so perhaps another point should be added to the score of the spot!

The Value of Flexibility

If sufficient care and cleverness are shown by the dramatic organization, a very small equipment will produce amazing results. The secret is flexibility: each light may in its time play many parts. A good minimum equipment is two or three strips, one or two floods, and a half dozen small spotlights ("baby spots" is the delightful technical name). But these lights must not be permanently fastened anywhere. Instead of permanent border lights, which will be of value only occasionally, there will be two or three battens, or pieces of pipe, hanging from the grid parallel to the footlights. If these are on lines, as they should be, they may be lowered to the floor of the stage. A strip or two, or two or three spotlights, may be clamped to the batten, set at the proper angle, and hauled up to act as borders. When that need is over, the battens may be lowered, the lights taken off, and the battens hauled up against the grid until overhead lights are again necessary, when the same process may be repeated. Meanwhile, a spotlight just off a batten, where it has been doing service as a border, may be clamped up against the proscenium, or it may be put

out in the auditorium on the railing of a balcony, or it may be attached to a standard to throw light in through a stage window. Moreover, a flexible equipment of this sort is capable of growth. It may start at a single strip, and one or two spotlights. One or two more units may be added for the next performance, and so on, until a very respectable equipment is gradually assembled. The details of such a scheme must be left to each organization, as they depend upon the financial condition, the plays that are to be performed, the ability of the stage electricians, and many other elements of the situation.

Homemade Light Units

Substitute homemade units are by no means impossible, if the aid of a good electrician is available.

1. *Homemade Strips.*—A series of light sockets may be fastened to a piece of wood, three or four inches wide and the desired length. A piece of tin, eight or ten inches wide, and of the same length as the baseboard, may be bent and fastened into an excellent reflector. It should be left bright inside, and painted black on the outside. In such a strip, the bulbs should always be arranged as in the illustration, so that they throw the light from the side. They give more light in this position; there is a "dead" spot at the end of most bulbs. These homemade strips may serve as footlights, or border lights, or proscenium-arch lights.

2. *Homemade Spots.*—A tin cone or horn may be made for a spotlight. It had best be made around a single large bulb, mounted on a socket which has been

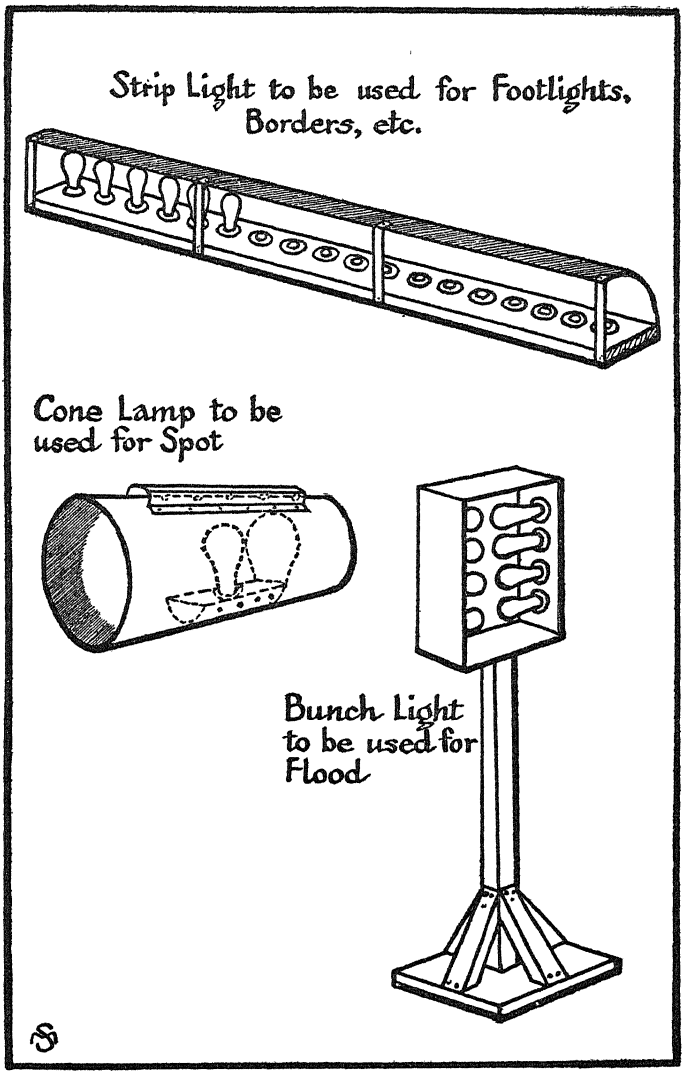


FIG. 64.—HOMEMADE LIGHT UNITS.

set on a square of wood. A tin reflector can be tacked to the back edge of the wooden block. Holes above the bulb will be necessary for ventilation, but it will be necessary to rivet a tin hood over the holes or they will let out light. Of course, this substitute will have no lens, which is the most important single piece of the spot light. But the homemade article will cast a limited spot of light. It will work better if the inner rim of the cone is painted black for a distance of six inches or so: this black rim helps to make the light from the cone less diffuse by preventing it from being reflected by the extreme edge of the cone—it prevents the light from "kicking off," in the technical jargon of the stage electrician.

3. *Homemade Flood.*—For a flood light, a bunch light is the best substitute. When electricity was in its infancy, before the huge powerful bulbs of the present day had been invented, bunch lights were universally used. It consists of nothing more or less than a box arranged to contain a number of small bulbs. It throws a diffuse light over a large area, just as a flood does. If a wooden box is used, it had better be lined with tin. It may be set on a standard, but if it appears at all top-heavy, it should be fastened to the floor whenever it is used. This may best be done with one or two stage screws. The amount of light may be regulated by unscrewing some of the bulbs. The variation possible with a bunch light is, therefore, from a single bulb to the united strength of the total number of bulbs. Color may be introduced by the use of colored bulbs, or by arranging a device at the front of the

box to hold gelatine slides. In making homemade electrical devices care must be taken to avoid fire risks: nothing should be done that will invalidate fire insurance policies.

Gelatines and Slides

Gelatine is one of the most important substances for the securing of modern light effects. It is a transparent medium, which may be purchased from theatrical supply concerns in an infinite number of colors and shades. It comes in sheets, approximately twenty inches square. A supply of these in assorted colors that are commonly used, might well be kept on hand. Frames to hold the gelatines may be purchased at very reasonable prices, or they may be easily made of either wood or tin. Gelatine curls with the heat, and it is easily broken, so that many of the large frames have fine wires stretched across the face (as in illustration on page 228) to help protect the gelatine. It should be the work of a few moments only to change the gelatines in the frames, but it is useful to have several slides for each unit, so that it will not be necessary to make changes during the course of a performance.

Colors in Gelatines.—The colors in gelatines that will be found most useful will be ambers, yellows, reds, blues, and greens. With these, almost any effect can be secured. "Frosted" gelatine, which throws a white light, is also essential. The commonest color for the representation of sunlight is amber, but some modern stage artists are beginning to be very much opposed to using this color at all. They point out, quite cor-

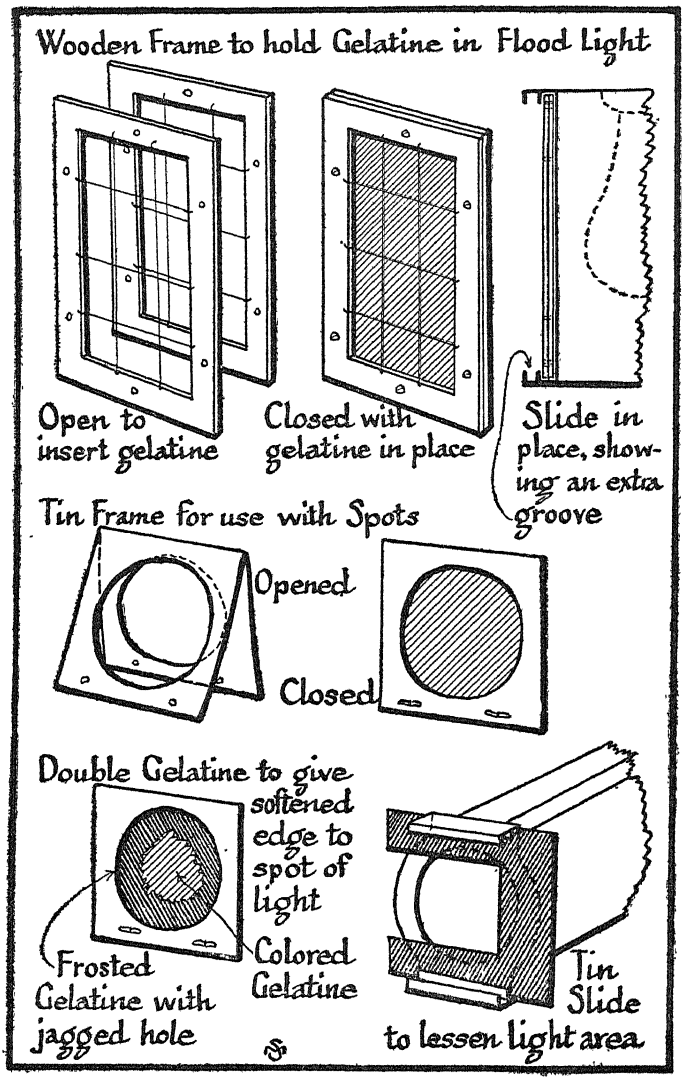


FIG. 65.—GELATINES AND SLIDES.

rectly, that it kills many of the other colors commonly used in scenery, costume, and make-up. They recommend that the effect of sunlight be secured by a combination of several gelatines: for instance, straw, steel blue, and light pink. Experimentation with these and other colors is exceedingly valuable.

Gelatines may be placed doubled in a frame, so that the light shines through a double medium. If a single sheet allows too much light to shine through, another sheet of the same color may be used. Two different colors may be placed together to create a third color. Many lights have grooves in front to take two slides, so that slides may be placed one before the other, and the two colors mixed by this method. Slides of frosted gelatine are exceedingly useful to cut down the amount of light without changing its color. Frosted gelatine is also of great value to soften the edge of a spotlight. By putting it in a slide with another color, and tearing a jagged hole in the center of the frost (see illustration), a soft edge is secured. Sometimes it is necessary to lessen the light area covered by a spot or flood light. Regular "shutters," similar to those in a camera, are sold by supply manufacturers; but pieces of tin, or even pieces of cardboard, may be used for the same purpose.

The Control of Lighting

The real problem of theatrical lighting has not yet been mentioned, and that is the problem of control. It is a subject of great difficulty, and cannot be gone into here in much detail. The common method is to

have the cables or wires from all the units run to a switchboard. A switchboard is a complicated arrangement of switches and dimmers, or devices for putting the electric current through rheostats so that less current reaches the bulbs, which thereupon grow dimmer. A good theatrical dimmer has so many "steps" that the lights can be made to change imperceptibly from their minimum to their maximum brightness, or from their maximum to their minimum. A homemade system of rheostats is not impossible, but it can only be made where expert and skilled help is available. When dimmers are not available, it is probably wise to avoid plays in which changing light effects are necessary, or else to depend upon the gradually turning off of small bulbs. For instance, if a bunch light is used back stage to cast a yellow light through a window for the duration of a scene, it may be possible to turn off the individual bulbs one at a time, a few minutes apart, thus gradually lessening the amount of yellow light thrown. If, at the same time, the reverse process is gone through with a bunch light that throws blue, the bulbs being turned on slowly one by one, a gradual change from the yellow light of afternoon to the blue of night may be produced. But in general, a process of this sort is too difficult to be worth the effort. The ideal situation is to have every light in the equipment on a dimmer. For example, there will be an individual dimmer for each circuit in the footlights, so that the red, the blue, and the white can each be raised or lowered at will. If dawn is to be represented, the footlights may first be set with blue and a little white:

during the scene the blue may be lessened, and the red raised; then the red may gradually be lessened and the white brought on, until the end of the scene finds nothing but the cold white light of dawn. In a large system, the thing will be still more complicated: the footlights may be divided into sections, so that it will be possible to change the red at one end independently of the red on the other. The same is true of all the other units. The borders will be controlled by a number of other dimmers; the spots, the floods, and the other units by still other dimmers. Moreover, all these dimmers will be interlocking: that is, it will be possible to make all sorts of combinations. If there is to be some blue light from the foots, the borders, a spot light or two in the balcony, and a flood light from one side, it should be possible to interlock the dimmers so that one lever will raise or lower all this blue. Successful elaborate lighting effects depend upon a large and flexible switch box.

Even one or two dimmers are useful, however, and organizations that are unable to invest in an elaborate switchboard might well secure a dimmer that can be plugged in to the unit on which it will be most useful for the scene. Excellent portable switchboards are now made by several manufacturers of lighting equipment, and they may be ordered for almost any price to fit almost any system. A large board may be planned, and but one or two switches and dimmers installed at the beginning, more being added from time to time as finances warrant. Growth is possible in lighting equipment, just as it is in all the other departments of non-

professional play production. Small individual dimmers are also made for spot or flood lights, and these are useful. The time put into the study of catalogues of lighting equipment and effects will not be wasted, and a collection of the catalogues of the different manufacturers should be an important part of the lighting equipment. Not only do they describe equipment, but they give many valuable hints on its arrangement and manipulation.

Balance in Lighting

Good lighting depends largely on balance. That is, units must be used to offset or else to reënforce one another. For example, suppose that the interior of a room is to be lighted. If footlights and auditorium lights are alone used, all the light will be coming from the front. Hence all the objects on the stage, such as chairs, tables, or other pieces of furniture, and all the actors in the scene, will cast heavy shadows backward on the floor or on the back wall. If overhead and side lights are now thrown on, this light will tend to decrease these shadows. If the same amount can be added as is thrown from the front the shadows will be neutralized and disappear entirely. Of course, the same effect can be secured by decreasing or increasing the amount of light from the front until the light from the sides and overhead is neutralized. Thus the two sets of lights may be balanced against one another until the desired effect is secured. Where dimmers are used, the amount of light coming from any one unit may be increased or decreased at will; where there

are no dimmers, it may be effected by turning out individual bulbs, or by moving the unit to bring it nearer to or farther from the surface that is to be lighted.

Method of Lighting a Scene

Lighting a scene is like painting a picture, and it is an exciting operation. On the professional stage, the director, or the designing artist, usually takes his place out front. At his directions the different units are then turned on and off, the intensities of the lights brought up or down, and the colors changed, until a satisfactory result is secured. The electricians then write down the light effects, noting just how each unit has been set. A similar operation is performed for the next scene. Care must be taken to see that the actors, as well as the scenery, are properly lighted. Therefore, if the actors are not available during this process, other persons must substitute for them. It is often very amusing in the professional theaters to see a husky stage hand stand or sit for a long period in the posture of the absent leading lady, while the director is working out the lighting scheme. It is impossible to be certain that an empty scene is being properly lighted, for one of the things that requires utmost attention is the way the light falls on the faces of the persons on the stage. Care must also be used to see how the shadows fall, and how they change during the movement of the actors. Lighting cannot be decided upon in the abstract, although the person in charge may decide just what effects he desires. In the professional theater many hours are often spent in

arranging and rearranging the lighting. Nonprofessional organizations ought to follow this same general scheme for working out the lighting. They should plan lighting rehearsals to see that the proper effects are obtained, and to give the electrician and his helpers practice in securing these effects accurately and quickly.

Some Principles of Good Lighting

There are certain general suggestions and certain principles of good lighting that should be familiar to all persons having to do with that part of play production.

1. The light should, as far as possible, come from some apparent source. This is a very important principle, and it should be understood and practiced much more widely than it is. A few illustrations should make it clear. If the scene is an interior containing windows, and the action is in the day, the light in the scene should *appear* to be coming through the windows. Rarely, of course, will it be possible to throw all the light that is necessary through the windows. It may be necessary to use footlights, a front border, and some proscenium-arch or auditorium lights. But enough light should be cast in at the window to throw a faint shadow of the frame on the floor. Persons walking near the window should cast a shadow just as they would in real life. There should usually be shadows in good lighting, although very faint shadows; for a shadowless room under natural lighting is nonexistent. Probably the easiest way to get this effect

is to fill the room with just about the amount of light desired, and then to bring enough through the window to give the proper natural effect. The same process should be followed in all other circumstances. If there is a lamp, or a lantern, or a fireplace, which would be a source of light naturally, that source should be utilized. A circle of light may be thrown by a spotlight from overhead around a table on which a lamp is standing. A spotlight from over the proscenium arch may reënforce the light from a fireplace. In lighting an outdoor scene, more light should be cast from one side than the other; only when the sun is directly overhead is outdoor light even, and it is then most uninteresting. Sometimes an excellent effect is secured by throwing a green or blue light from one side; this helps to make faint but interesting shadows. Black, heavy shadows are usually to be avoided, but faint shadows, which will be hardly noticed by the unobserving, are essential. Scene designers should do their part to secure good lighting, by providing in their designs apparent sources for light.

2. The scene should not be flooded with white garish light, but it should not be so dark that the audience is obliged to strain in order to see what is happening. Overlighting is a common fault, but underlighting is probably more generally annoying to an average audience. Dark scenes should be of very short duration, as they are very tiring, to the ear as well as to the eye. Often the effect of darkness can be maintained by starting with the scene dimly lighted, and then by bringing on more light so slowly that the change is imperceptibly

ble to the eyes of the audience. This gives the psychological effect of the eye growing accustomed to the darkness so that it sees better.

3. When possible, unity of control should be established. All lights, even those that light up the auditorium, should be under the control of one switchboard. If unity of control is impossible, as is too often the case in school auditoriums where lights are so often on different switch boxes, some system of signals may be devised so that the several persons operating lights are brought together under one leader.

4. The color wheel is a useful tool in lighting as in the other arts dealing with color (see page 98). Complementary colors tend to kill each other, because they tend to produce a grayness. Warm colors in lighting reënforce warm colors in the costumes or scenery, while they dull cool colors; of course, the reverse is also true. Every color is brightest under a light of the same color; that is, a red light makes a red costume still more brilliant. Gelatines of light color, as straw, lemon, steel blue, and so forth, usually produce less color changes in the scenery, costumes, and make-ups, than do more brilliant and vivid gelatines. The lighter colors are, therefore, more generally useful.

5. Finally, some of the cleverest lighting effects are those of which the audience may be entirely unaware. If a character has to make an important speech from a certain position, it may be that his face would be indistinct and uninteresting under the normal lighting of the scene. A baby spot, properly directed, and brought up slowly at the correct time, may give this

character just the proper lighting without any one in the audience being aware that there has been any change in the lights. If a ghost is to appear, as in "Julius Cæsar," the normal lights may be dimmed out and green light run in so gradually that the audience does not notice the change; but this lighting trick will intensify the entrance of the ghost and make it many times more effective than it would otherwise be.

Nothing has changed more in the theater of recent years than lighting. Devices and ideas have multiplied. There have been schemes for indirect and reflected light, for refracted light, for synthetic light, and for many other varieties. These are described in many of the recent books on the new movement in the theater. A study of these books, and, better yet, careful experimentation in lighting, should convince the nonprofessional producer of the wonderful, unfulfilled possibilities of this glorious element—light!

CHAPTER XIV

THE BUSINESS DEPARTMENT

Importance of a Budget

The business department requires skillful management and systematic planning.[1] (See pages 19-20). The first duty of the business manager and his assistants is to make out a budget for each and every performance. A careful manager will know what the probable income will be, and he will figure a sufficient margin so that if his income is not what he expects it to be, he will nevertheless clear his expenses. If he expects to sell so many tickets at such a price, he will see that his budget of probable expenses is only a certain proportion of this sum he hopes to collect. Some of the items that will probably appear on his budget will be expenses of the theater, scenery, costumes, make-up, printing of tickets and programs, advertising, and royalty on the plays to be given. After the performance, he should make a careful and complete report of his actual expenses, his income, and the profit; and this report should be permanently recorded in some way for the

[1] For further discussion of the business department see Oliver Hinsdale, *Making The Little Theater Pay,* (Samuel French, New York, 1925). Alexander Dean, *Little Theater Organization and Management* (D. Appleton & Co., New York, 1926).

benefit of future managers. In management, as in all the other departments of amateur play production, it is important that the experience of one performance be passed on for the next.

Other duties that the business department must perform fall into obvious classifications:

Tickets

The business manager, or his assistant who has charge of the tickets, must be certain that the tickets contain all the necessary information: the time, date, place of performance, and the price. It is very disconcerting to find, after the tickets have been distributed for sale, that some important fact has been omitted. In general, it is probably more satisfactory to number the seats, so that persons may know in advance just where they are to sit, than to sell admission only. This means that the tickets must be numbered to correspond with the seats. The numbers on the seats should be so arranged that a glance shows in what section the seat is. Rows are usually designated by letters, starting with the row nearest the stage. If there is a middle aisle, so that there are two sections of seats, numbering usually starts in the middle and goes out, with the odd numbers on the left, and the even numbers on the right. Thus, seat C6 will be the third seat from the middle aisle to the right in the third row from the front. Seats C1, C3, C5, etc., will be adjacent to one another in the left section. If there are three aisles, the left section may be number 1, 3, 5, etc., the middle section 101, 102, 103, etc., and the right section 2, 4,

6, etc. A similar scheme may be worked out for four or more sections. The thing to avoid is numbering seats consecutively from one side to the other clear across the hall. The ticket manager should probably keep a floor chart and check off seats as they are sold. Many Continental theaters have small models of their auditoriums at the box office, so that the purchaser of tickets may see exactly where the unsold seats are. This is an amusing and interesting device for amateur groups to follow. Where there is no single box office to which purchasers come, or when members of the group make a general attempt to sell tickets throughout the community or the school, it sometimes complicates matters to have numbered tickets. Some groups attempt to overcome this difficulty by having preliminary tickets sold, which may be exchanged for numbered ones at the box office at certain definite hours, or even at the door just previous to performance. Complete arrangements must be made for selling tickets at the door, and for collecting them at the entrance to the theater. A ticket that is well printed and attractive is usually well worth the slight extra expense.

Programs

The same is true of programs—they can be made very attractive if they are designed and printed with taste, and the effort required to make them interesting is entirely worth while. Probably each organization should adopt some standard form to use in all its programs, rather than to leave the form to the caprice of each manager or any printer. Some groups make each

program an interesting little magazine, containing a discussion of the plays to be presented on the present bill, historical information about the plays, a suggestion about the future plans of the group, and any other matters that might interest friends. In any case, whether the program is to be an elaborate little pamphlet containing advertisements, or whether it is to be a plain and single sheet containing nothing but the cast of the play for the evening, it needs artistic planning.

Advertising

A real advertising campaign is usually essential. The advertising manager should attempt to have a series of interesting items in the local, or the school, paper. These may well discuss the play that is being prepared, tell interesting incidents about its preparation, and describe its successful performances in other parts of the country. Posters may be designed and displayed. A contest for a play poster in a school or college usually stimulates interest in the coming performance. A model, or a series of models, of the stage settings to be used may sometimes be placed in a store window, or in some prominent place, and it rarely fails to attract attention. In a school or college, where the auditorium is used daily, it often advertises the play to leave one of the scenes set so that it will be seen by all who pass through the auditorium. Sometimes, too, it is possible to have short special acts, or stunts, as part of some assembly or chapel exercise. To keep the community interested and informed about dramatic

activities is a challenge to the ingenuity of the managers.

Controlling the Audience

The duties of the business management are not over, however, after an audience has been assembled for the play. There arises the problem of keeping that audience safe and comfortable throughout the performance, and this is an important matter that is often neglected. Some representatives of the business manager, usually called the house manager in the professional theater, should have this duty. He should feel that he is the host, and that each and every member of the audience is his guest. He should see that the theater remains at a constant and comfortable temperature, and that it is properly ventilated. He must have a competent force of ushers, who are acquainted with the seating arrangements, and who know the art of politely showing people to their seats. He must have the programs distributed. And he must be always ready to remove fainting ladies without disturbing the other members of the audience, to keep the audience calm in case of accident or fire, and to keep his head and his temper in any of those other emergencies that sometimes arise at theatrical performances.

CHAPTER XV

THE PERFORMANCE

All the details of play production discussed in the previous chapters must not cause the nonprofessional producers to forget that a play is, after all, a unity. It is an effect upon an audience. Technical skill in acting, or in managing, or in making scenery or costumes, has value only as it helps interpret the ideas of the author. And this interpretation is the performance. Nothing less than the union of the author's idea and the audience is a performance. The performance is the product of all the work previously described.

Work of the Stage Crew

To the end that the play may be properly performed, each person back stage must know what he is to do. There is no room for confusion. The electricians, the sceneshifters, the property men, and all the other members of the producing staff, should know their duties, and should perform them quietly and well. This back stage force should be correctly organized under the generalship of a strong stage manager.

"Station" of the Actors

There should be some definite place for the actors to remain, even in the smallest of performances and

the most poorly equipped theater; and they should not be allowed to stand around behind the scenes, or to "help" the stage hands shift the scenes and the properties. Traditionally the place where the actors wait for their appearances is called the "greenroom." Many modern theaters are built without a greenroom, although it is beginning to be used once more. For nonprofessional groups the idea is a good one: if no room is available, some corner, or hall or staircase should be the "station" of the actors who are waiting for their cues.

"Station" of the Director

There are two different theories as to where the director should be during the course of the performance. According to one, he should have the actors so well trained and the performance so well organized that he may take his place in front of the curtain and view the play like any other member of the audience. Where the play is repeated several times, probably this can be worked up to. However, for the director to leave the performers alone is perhaps the council of perfection. Amateurs, especially young people, usually have more confidence in themselves if the director is behind the scenes with them. They often feel that they are deserted if they know that he is "out front," where he cannot be reached in emergencies. It is like the coach of the football team leaving the team to play an important game alone. For this reason, it is often wise for the director to remain behind. And then, emergencies do arise in amateur dramatics, in spite of the best-laid plans. Nevertheless, there is no reason why

any director of amateurs should insist on being himself the stage director, property man, prompter, stage manager, make-up man, etc. The performance should be so organized that it *could* easily succeed in the absence of the director.

Importance of the Prompter

In the back stage organization, the prompter is an important cog. The prompter needs to be a faithful and intelligent person. He must be present at all the rehearsals, and he should know the lines and the movement of the play better than any actor in the cast. To have a prompter come in at the last moment, or to ask some one who has been at few or no rehearsals, to act as prompter, is the height of absurdity. A quick-witted prompter, by a judicial skipping of a line or two, or by the creating of a line to bring the actors back to the text, may often save the play in case of slips—which should never occur, but sometimes do.

The Call Boy

An assistant prompter, or a call boy, should be appointed to see that actors in the greenroom are warned of their approaching entrances, and to see that they are in the proper places in time. This device will make it possible to keep actors off the stage except when they are needed.

The Prompt-Book

The creation of a prompt-book is not the least among the many duties of the prompter. A prompt-book

should be a complete record of the performance. It should contain all the action of the play, the noises, warnings for the entrances, the curtain, etc. By pasting the text in a large scrapbook, and leaving a blank page facing each page of text, a complete prompt-book can be worked out. Some prompters like to divide the blank page into columns—one for entrances and warnings, one for noises, one for lights, etc. Unless there is a real prompter who has faithfully done his work, it is best to dispense with the office all together. No prompter at all is better than a poor one. But no official is more important for a smooth performance than the prompter.

Atmosphere

The atmosphere behind the scenes is another thing that requires consideration. The hectic scramble that some amateurs connect with the performance is entirely unnecessary and undesirable. Proper planning and rehearsing of actors and the entire producing staff should make the performance a pleasant experience both to those who are behind the curtain and to those who are in front.

INDEX