

RUNNIN' THE SHOW

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RUNNIN' THE SHOW

A Practical Handbook

By

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RUNNIN' THE SHOW.

Dedicated to

MR. E. E. CLIVE

Actor Director Producer
 and Friend

under whose guiding hand we have
been shown the way of the Theatre.

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RUNNIN' THE SHOW

THE STAGE

Many books have been written about the theatre. They have been books on playwriting; books on play producing; books on acting; scenery; lighting;— in fact — books on practically every subject connected with the theatre. In writing this present book the authors have tried to prepare a convenient handbook for stage managers usually responsible for the thankless task of "Runnin' the Show."

In amateur productions it is generally the stage manager's job to arrange about scenery, properties, lighting, off-stage effects, and one hundred and one other things that on the professional stage are handled by a number of different departments. In the following pages the authors have attempted to describe and illustrate "What the Amateur Stage Manager Should Know" — a phrase that might fittingly be employed as a title to this little book if the present title had not already been selected.

Naturally, the first thing that a stage manager should be thoroughly familiar with is the stage itself. Figure I shows the various component parts of the average stage. The shaded portion in the diagram is the proscenium arch. This is the frame that mounts the stage. Before it are the footlights — oftentimes referred to simply as the "foots" (E). The space

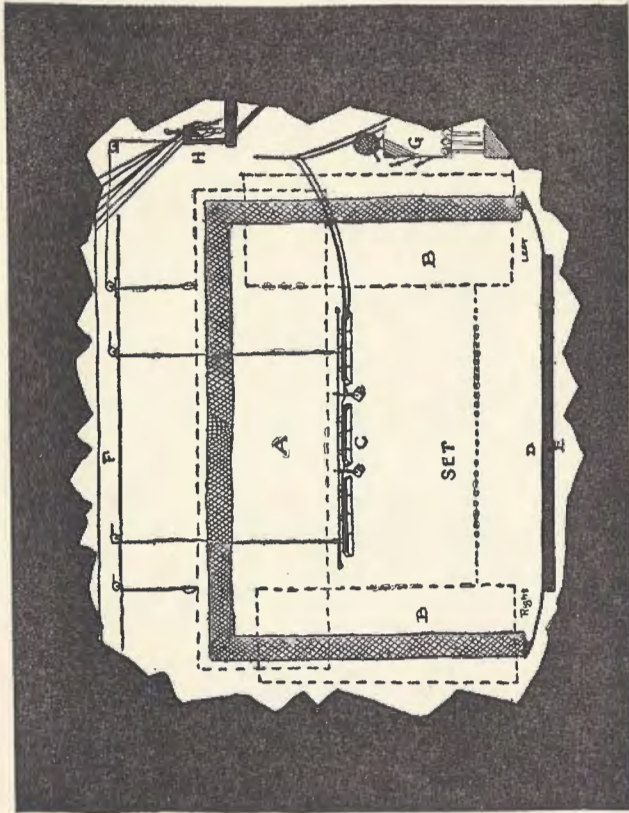


Figure I

between the proscenium and the footlights is called the "apron" (D). Actors, as a rule, are not supposed to trespass on the apron. The frames that enclose the scenery at the right and the left and from above are called the "teaser" and the "tormentors" (A and BB). The teaser (A) can be raised or lowered to give what is called the "trim" on the set. Also the tormentors (B B) can be moved on or off stage as the width of the opening demands. It is to these tormentors that the set is "lashed" or tied, provided, of course, the set is an interior.

The concert border or X-ray (C) shows two spot lights attached to the iron pipe between the sections of X-ray lights which will be explained in detail later on. The concert border is usually hung by a heavy wire cable from the gridiron (F). Scenery not in use is also hung from the gridiron. The control of the gridiron is at one side of the stage and is termed the "flys" (H). The men who work these ropes or cables are called "flymen".

The electric switchboard (G) is not always on the same side of the stage as shown in the diagram but the left side of the stage is generally conceded to be the best position for all round requirements.

SCENERY

In the matter of setting the stage there are many forms of scenery which may be used. We will discuss the simplest methods for the amateur stage first. Probably the easiest way of dressing a stage is with curtains

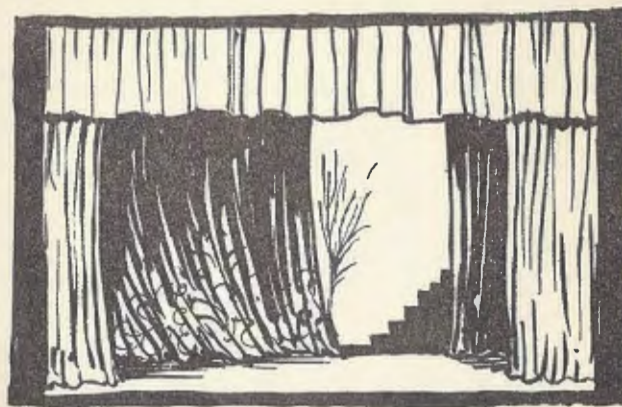


Figure II

or draperies. Many different kinds of fabric can be used for this purpose. Cotton — miss-printed material from cotton mills — is not only very cheap but is also very effective. Burlap, denim, or creton can also be used. Velvet is perhaps the best material for stage draperies but its cost makes it almost prohibitive for most amateur organizations. Figure II shows an ordinary arrangement of curtains. They are fastened to

strips of wood that are called battens which hang from the gridiron by ropes. Figure III shows the method of tying a set of curtains to the battens.

CYCLORAMA

A curtain that encompasses the stage from right to left in a semi-circle is called a cyclorama. Figure III

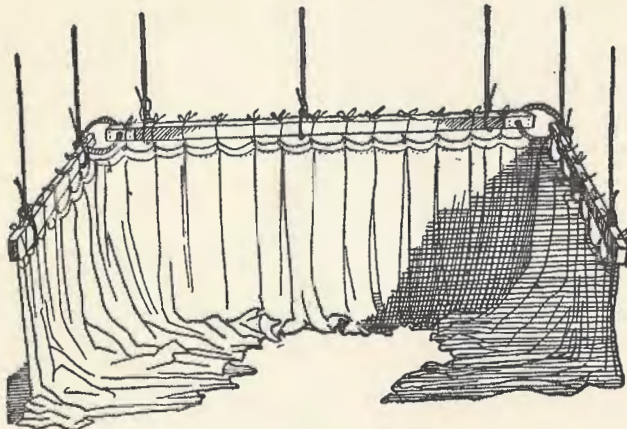
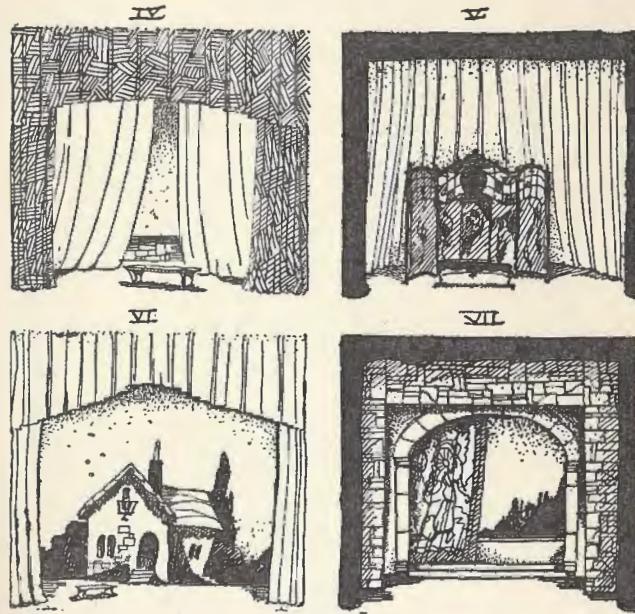


Figure III

shows how the battens are arranged in three sections that are called "arms" and which hang up and down stage giving the curtains the sweep of a semi-circle.

Cycloramas in theatrical parlance are referred to as "velvet cyke" or "black cyke", etc. The most usual form of cyclorama is that which takes the place of the sky drop. It is painted either white or a pale blue and

hangs in the same manner as any other curtain the only difference being that it is usually hung further up-stage — that is, nearer the back wall of the stage.



BORDERS

Sets of curtains unless they are of unusual height and there is no obstruction of view must have borders to match. Borders are used principally to hide the "border lights" that are usually hung directly behind them. The borders are made of strips of the same material as the curtains. The height is never much more

than six feet and the width is, of course, determined by the width of the proscenium opening. They not only mask the border lights but also the tops of the curtains or cyclorama. The borders are also hung on battens in the same manner as the center section shown in Figure III.



Figure VIII

Sometimes one border is all that is necessary to mask both the border lights and the tops of the curtains, but two borders, however, are usually safest because various portions of the audience see the stage from different angles.

A set of curtains either of a plain color or black, arranged in cyclorama form — two borders — a sky backing — a set piece, in this case a wall — and we have a set something like the one shown in Figure IV.

Figure V shows another arrangement of curtains and the possibilities of this medium for a stage setting. Figures VI and VII show other curtain suggestions.



Figure IX

SET PIECES

A set piece, as the name implies, is a piece of scenery that "sets" by itself on the stage. It is sometimes termed a "cut-out" or a "profile" piece. Figure VIII depicts the use of a set piece. This method is usually employed with a sky cyclorama and is particularly useful in musical revues, tableaux, and fairy plays. In Oscar Wilde's "The Birthday of the Infanta" there is an excellent opportunity for set pieces,

Set pieces are made from any solid material. Wall board or beaver board are the cheapest and easiest for use. The design or figure is painted on the wall board and then cut out with a key-hole saw. This piece is braced from behind to make it stand in a firm upright position. Whole plays can be sometimes staged in this manner with great success. Set pieces of green garden hedge rows set in front of a cyclorama are particularly useful in exterior scenes. Figure IX shows another arrangement of the set piece.

LEG DROPS

A leg drop is a drop or curtain cut in the form of an arch with two legs which act as wings. Three or four leg drops arranged in series in front of a back drop (a painted curtain) form a complete setting. Figure X illustrates the use of leg drops.

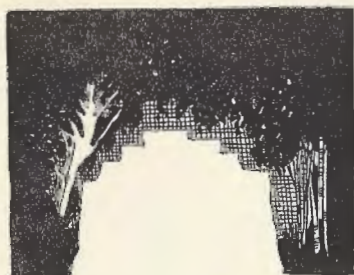


Figure X

Effects of great distance or depth may be obtained by the use of leg drops if the size of the arches is diminished as they recede upstage. (Figure XI).

Leg drops can be used for interior as well as exterior settings. The number of leg drops necessary for a set is determined by their arrangement for masking properly. Effects of great

BOX SETS



Figure XI

A box set is the commonest form of stage setting. It shows three walls of a room—the fourth wall being an imaginary transparent wall separating the audience from the stage. Box sets are made up of “flats”, “wings”, and “jogs” lashed together.

A “wing” is a flat piece of scenery varying in width from 4 feet to 9 feet. Flat scenery less than 4 feet in width is called a “jog.” Scenery more than 9 feet in width is called a “flat”. A flat is also the name given to a solid wall, such as: back flat, left flat, right flat, etc.

Figure XII shows the method in which flats are lashed or tied to-

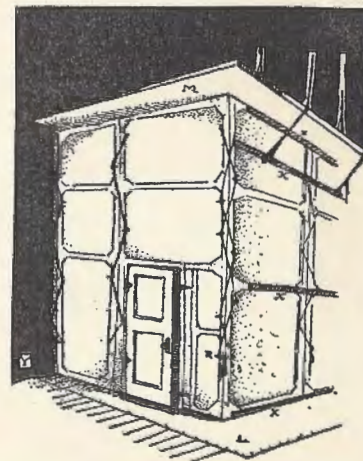


Figure XII

gether with ropes (lash lines) which are attached to the top of each wing. The rope is laced to cleats or nails placed in the adjoining wings at intervals of two or three feet. The two side flats, right and left, are lashed to the tormentors. (See B B in Figure I and Y in Figure XII).

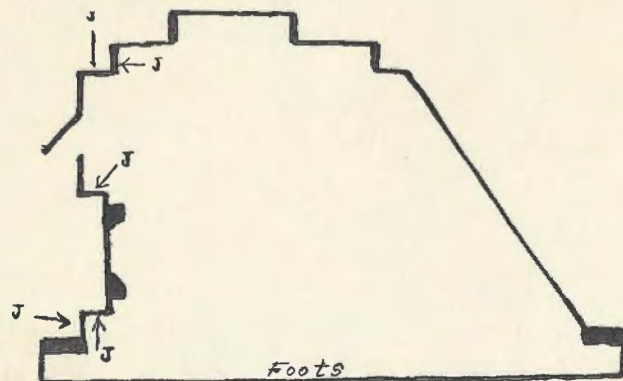


Figure XIII

Back flats, as a rule, are solid. If it is possible to fly them, that is — to raise and lower them from the gridiron — they are battened together as shown in Figure XII and marked X.

When a set is not completely square the juts or return pieces are called "jogs". Fig. XIII.

The usual size of a wing is 5 feet 9 inches wide and from 10 to 13 feet in height. Jogs range from six inches to 3 feet in width.

After the frame is built it is covered with cotton or linen. Rougher materials may be used if desired.

Before painting the covering must be "sized" with a wash of glue and water. This fills the web of the material — stiffens it and makes it ready for paint. Sometimes the "sizing" can be done with a body color of the set.

When an old set of scenery has become flabby it can be brought back to life by a "sizing" of alum and water lightly spread over it. The alum stiffens the material and to a great extent brings back the color of the set. This method is often employed when old scenery comes out of the store house.

STAGE DOORS

The old-fashioned canvas doors are very awkward and unsatisfactory. Figure XOX shows a real door constructed to fit into a set. The door frame is made as any ordinary door with the exception that on the sides of its thickness are placed two large hinges. These are placed flat against the wooden frame. The door is moved into position in its opening in the set and the hinges are pulled down to a horizon-

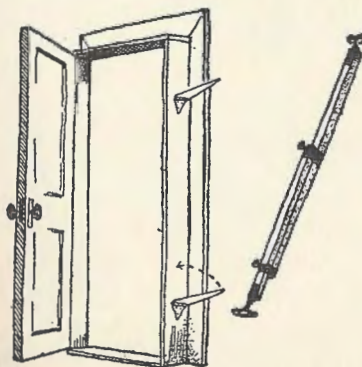


Figure XOX

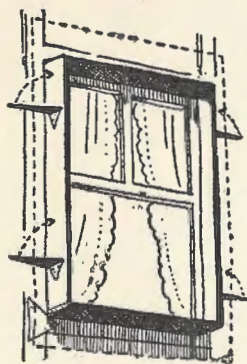


Figure XOI

tal position thus bracing the door. Figure XOX also shows a stage brace used to brace all types of scenery. One of the most essential properties of the theatre.

STAGE WINDOWS

Figure XOI shows the back view of an ordinary type stage sash window. Its method of construction and use are the same as Figure XOX.

CEILING PIECES

At one time borders were always used for ceilings in interiors. Now-a-days, it is customary to use a ceiling piece with box sets.

The ceiling piece is not as difficult to use as is generally imagined. In Figure XII the ceiling piece is represented by the letter M.

There are many ways to make ceiling pieces. Figure XV shows the usual

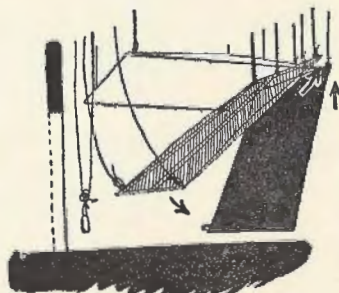


Figure XV

ceiling piece and how it is raised and lowered. The front lines are lowered and tied to sand bags to prevent them from slipping up through their pulleys. The fly-men on the gridiron lift on the back lines and raise the ceiling up into the flies just as they would any flat or curtain.

Figure XVI shows another form of ceiling piece and its method of raising and lowering. This type of ceiling is more effective when painted with beams as the fold in the center is less noticeable than when it is plain white.

Ceiling pieces really play a double part—they not only add to the reality of the set but they act as sounding boards for the actors' voices. Without the ceiling the sound rises to the gridiron instead of going out to the audience. For this reason ceiling pieces should be used whenever it is possible to do so.

When a set is changed or taken down the term "struck" is used. In "striking" a box set the ceiling is the first thing to move. All of the ropes attached to the ceiling piece are pulled raising it a foot or two

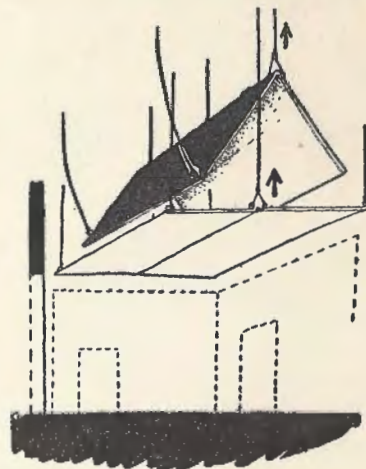


Figure XVI

above the set. Then the sides are struck and last the back flat. All the furniture and properties used in the set are taken off and the furniture for the next set brought on the stage before the scenery for the next set is assembled. In the case of an exterior set the ceiling piece is also struck.

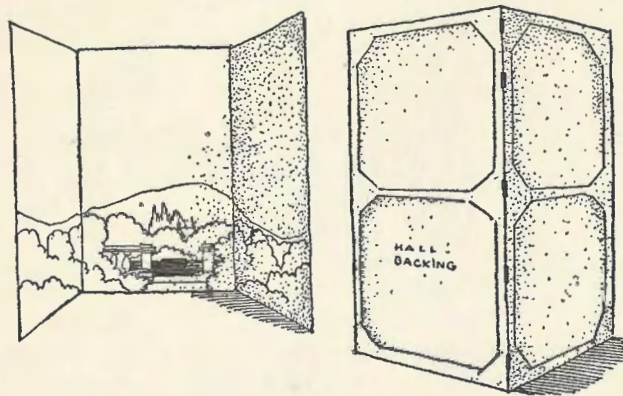


Figure XVII

BACKINGS

"Backings" are the pieces of scenery used to mask openings in a set. They are usually called hall backing, garden backing, fireplace backing, etc.

The various backings are usually constructed in the manner shown in Figure XVII. There are, of course, several other ways of making backings. Large backings are sometimes made with three hinged joints. These are called three-fold backings. They are fre-

quently used behind large French windows or conservatory flats. The backings are made in this manner so that they may be set without braces; also because their construction allows them to be folded and easily tucked away. The framework of a backing is similar to the framework of wings and jogs.

DROPS

A drop is a curtain that hangs from the gridiron. The commonest drops are garden drops, forest drops, sky drops, and street drops.

CUT DROPS

A cut drop is a leg drop as has already been explained. Figure X illustrated cut drops. As may readily be seen cut drops are very effective and can be used to create many beautiful settings.

Forest foliage is generally made in the following manner: the scenic artist paints the trees, leaves, boughs etc., and then the drop is spread out on the stage and the stage carpenter and his assistants cut out the various portions which the artist has left unpainted. Because of the glue sizing in the cotton cut drops are liable to turn and twist when they are hung. This is remedied by gluing a wide net similar to a fish net over the back of the drop and cut outs. The net is painted the same color as the drop and not only keeps the cut outs in place but prevents the ripping and tearing that might happen when the drop is being

raised or lowered. If proper netting is not easily obtainable a heavy sizing of glue painted on the back of the cut drop will serve almost as well to prevent curling. This method when otherwise employed in the theatre is called opaueing.

Cut drops of foliage when hung in sets of three or four before a sky drop or cyclorama make the most effective exterior scenes. Borders are often cut in this manner and are used with old wood wings.

WOOD WINGS

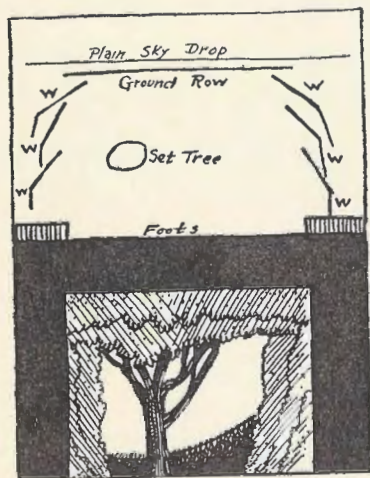


Figure XVIII

they should be far enough on stage and close enough together so that they will lose their "hard edge" effect.

The use of wood wings is now considered rather old-fashioned in the theatre. However, if wood wings and borders are all that the amateur producer has at his disposal there are several ways of changing their antique appearance. For example, wood wings should be set as far off stage as possible, or else

Whenever it is possible the stage should be broken up with a set piece such as a set tree as shown in Figure XVIII, or a set house, or rock—something that will dominate the scene and make the wood wings less noticeable.

THE KEY SET

The use of a key set is one of the best methods for simplified scene setting. Both professional and amateur producers frequently use key sets and find them very effective and successful.

A key set, as the name implies, is controlled by a key, that is—some set thing or structure which is permanent. Within or without this structure things change—wings move—doors replace windows—but the key piece remains standing. The various change units fit into the key.

Figure XIX illustrates four different possibilities with a key set. The side walls and the two step platform constitute the key. Curtains are replaced by solid walls, and these in turn, are raised to disclose a sky backing or a garden gate.

The use of a key set is one of the finest methods of staging a Shakespearean play where there are many scenes to an act and scene changes must be made quickly.

Both interior and exterior scenes can be done in this manner and it is possible to produce a number of different plays in one key set.

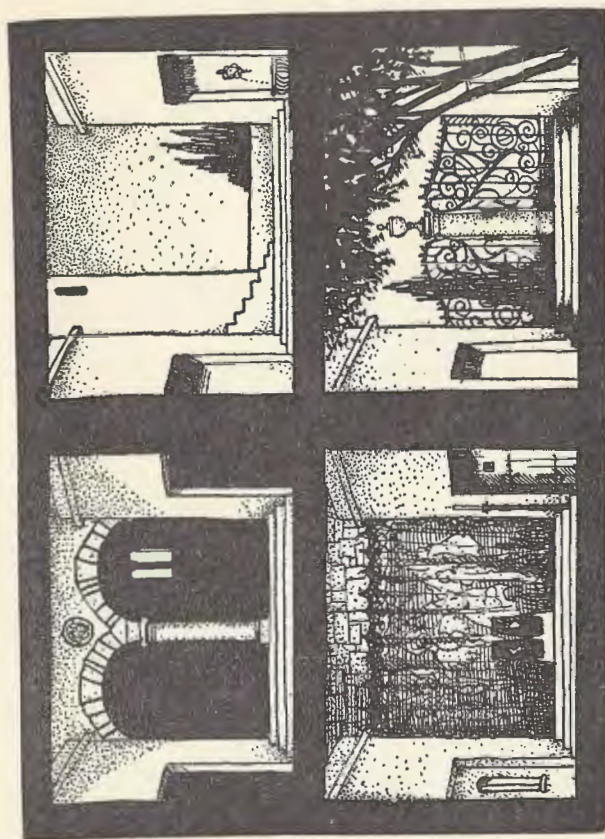


Figure XIX

SUGGESTIVE SETS

Suggestive sets are incomplete sets. The design is created from suggestion. The interior of a cathedral is suggested by a fluted column rising into blackness.



Figure XX

A spotlight illuminates the base of the column. See Figure XX. A bedroom is suggested by a corner of a room and a bed. A deep forest by several bulky tree trunks rising into nothingness. Suggestive sets are usually played in a black cyclorama.

SCREENS

A very simple method of staging a play is by the use of screens. Screens are constructed in the same way as wings. Sometimes they are covered and painted

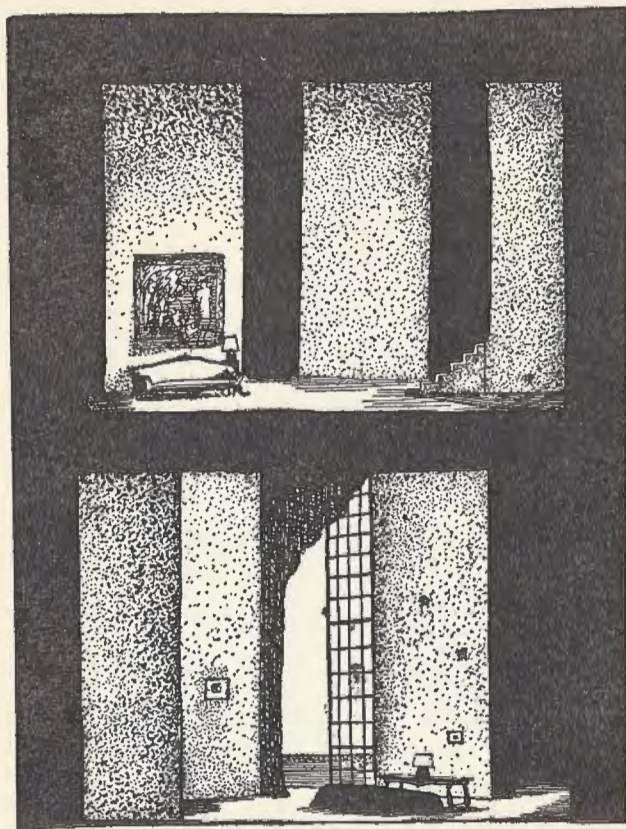


Figure XXI

on both sides so they can be reversed. Screens are usually mounted on castors so they can be wheeled quickly to various positions on the stage. Figure XXI shows various groupings that may be made from four screens.

Screens are most effective when painted a neutral color that will take any light projected on them. The use of "stippling" (painted dots or shading produced by separate touches) is particularly effective when applied to this type of set. However, this method is not advisable unless the director has lights at his disposal with which he can obtain varying effects.

PROJECTED SETS

Projected sets are particularly adaptable to tableaux and religious dramas. In making this kind of a set a plain white drop is hung at the back of the stage and a few feet in front of it a leg drop cut in a plain arch frame painted as desired. Between this arch steps or walls not more than three or four feet high are placed. Directly behind this is a projector or stereopticon which is focussed on the white drop. Colored slides used in the projector are reflected on the white drop and give the set desired. Figure XXII shows

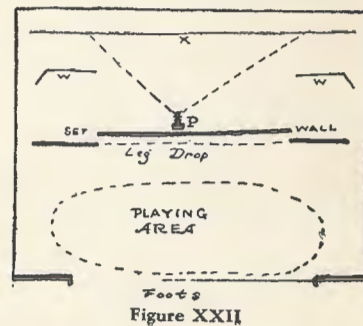


Figure XXII

the use of a projected set. P in the diagram is the projector and X is the white drop.

In using this kind of set the action of the play must take place down stage and not between the projector and the screen. Also it is more effective when

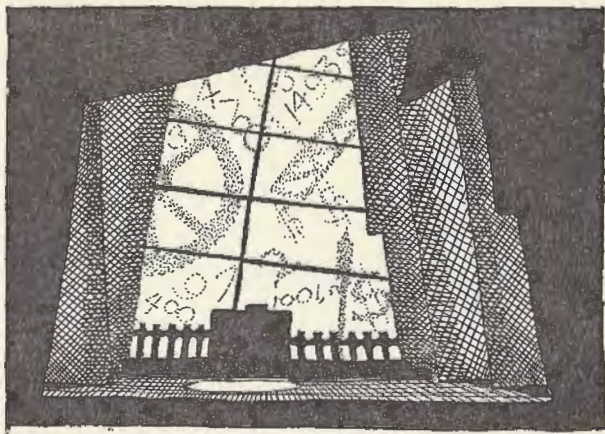


Figure XXIII

the back of the stage between the arch drop and the white drop is in complete darkness except for the projector. Footlights cannot be used with this method — the light illuminating the playing area must come from directly above.

Projected sets can also be done from behind the scene. In this case the projector is behind the white drop. Employing this method, however, makes the projected image somewhat faded.

PROJECTING IMAGES FOR DRAMATIC EFFECT

Figure XXIII and XXIV illustrate the method of projecting an object against opaque windows and the

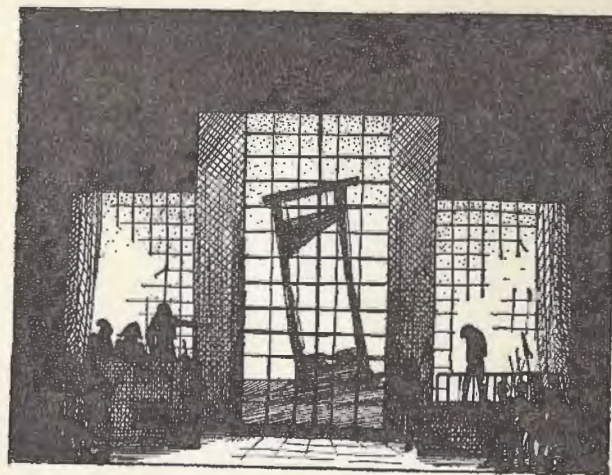


Figure XXIV

back of the set for a dramatic effect. Figure XXIII is a modernistic setting for "The Adding Machine" by Elmer Rice. The numbers and wheels move in weird rotations on the windows at the back as the leading character reaches the climax of the play.

Figure XXIV is the projection of the guillotine in the last act of "Danton."



Figure XXV

SILHOUETTE SETTINGS

Another form of the projected set is the silhouette setting. The back drop is illuminated brightly from behind and the scene and actors are thrown into black relief. Various effects may be projected on the drop by placing cut pieces of paper before the lens of the projector.

CUT DROPS IN SILHOUETTE

The cut drop is hung as far down stage as possible next to the tormentors and teaser. It is painted black. Behind the cut drop is the set brilliantly lighted. This is a very novel and useful effect for certain types of plays. Figure XXV shows some interesting designs that may be obtained by this method.

BAG TREES

The easiest method of making set trees that really appear life-like is by cutting out two semi circles of wood of the size desired for the trees. A strip of canvas is then painted in the wildest of colors — red, blue, green, and yellow, etc. Plenty of sizing should be used and both sides of the canvas should be painted. After painting the canvas should be twisted and crumpled as much as possible and then put aside to dry. When it is thoroughly dried it should be pulled carefully apart still wrinkled and folded. The ends are then tacked to

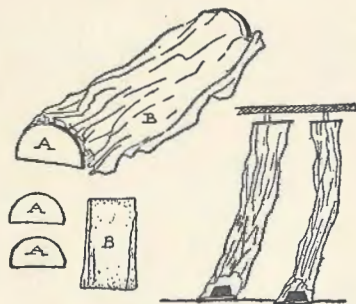


Figure XXVI

the semicircles of wood. See Figure XXVI. One of the semicircles of wood is attached to a rope and raised to the gridiron. The other end of the tree which stands on the stage is weighted. The tree can be made to lean either to the right or the left as desired. Borders of foliage should be used with these trees. Figure XXVII shows how various sets can be made by different arrangements of trees hung in front of a cyclorama.

BAG COLUMNS

Columns may be made in the same manner as bag tree except that they are not wrinkled or folded but are tacked onto the semi-circles as smoothly and evenly as possible.



Figure XXVII

FLUTED COLUMNS

Figure XXVIII shows how a column may be fluted by tacking the canvas in pleats to the wooden semicircles. When bag trees or columns are used care

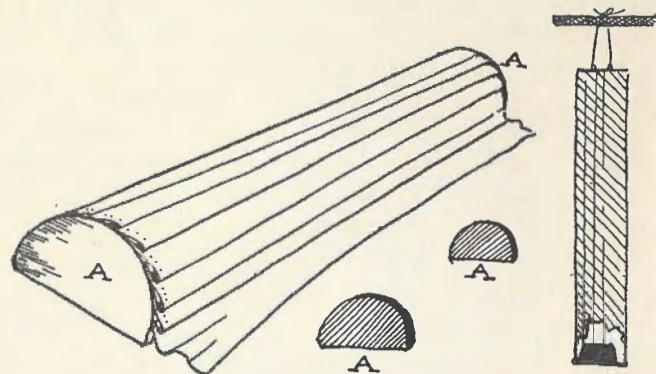


Figure XXVIII

should be taken that the actors do not lean too realistically against them as disastrous results may follow and a serious Greek tragedy may be turned suddenly into a farce.

SKY DOMES

Sky domes are particularly effective. For one thing they have three dimensions instead of two. They curve above the actors' heads and suggest great distance or height.

Domes are really only half domes. They are usually constructed of plaster over wire gauze. Their surfaces are smooth and are painted white, silver, or pale blue. Effective as they are they are too clumsy and impractical for small stages where space is naturally limited and needed for other scenery. Besides, domes are expensive to build and are usually beyond the scope of most amateurs.

There are many types of sets — futuristic — impressionistic — constructive. However, for the most part, these types of sets are whims and fancies which will soon be forgotten. They are fundamentally wrong from any angle and are rarely successful. After all, it is "the play's the thing" and the scenery must not over-shadow it. The amateur will do well to forget such settings exist and devote his energies to the simpler and recognized types of settings.

STAGE LIGHTING

The proper lighting of the stage is perhaps the most difficult problem in producing a play. There are many different ways in which it may be done. One producer will illuminate the setting; another wants his actors to appear in relief; and yet another will demand that certain parts of the set where important action is to take place shall be more brilliantly lighted than other parts.

The value of stage lighting is undisputed as such men as Rinehart and Belasco have demonstrated. While the amateur may not be able to give the finesse or quality to lighting that professional producers demand, he can strive to "get the effect," which, after all, is the basic principle of all stage lighting.

Let us imagine that we are about to produce a play — one that demands lighting, blackouts, dims, etc. If the average technical director is given a free rein in the matter of lighting and scenery, he may, in his enthusiasm for his particular department, forget that "the play's the thing". Scenery or lighting must never be allowed to take away the audience's attention from the play itself. They should, indeed, be considered in the light of oils with which the color of the play is painted.

THE SWITCHBOARD

Every theatre, hall, and auditorium has its switchboard whether it is a single electric push button or a complicated arrangement of switches and rheostats.

The stage lights are controlled by the electrician at the switchboard. During the performance of a play the stage manager generally stays near the switchboard so that he can direct the electrician when there is to be a change of lighting on the stage.

THE X-RAY or CONCERT BORDER

The first strip of lights hanging against the teaser is called the X-ray or concert border. Ordinarily the concert border is nothing more than a tin trough with a number of 50 watt lamps. The other borders are the same as the concert border except they sometimes have colored lights. Most small halls and theatres have two or three of these borders.

The X-ray border is a little more complicated. It is made up of sections of individual lamps surrounded by reflectors. The lamps are usually either 100 watts or 250 watts. In front of each of these sections is a set of grooves in which color screens may be placed over the lamp to give various effects. These sections are chained to an iron pipe which hangs from the gridiron and can be raised or lowered as the "trim" of the set demands.

FOOTLIGHTS

Every theatre is equipped with a row of lights placed along the front of the stage which are called footlights. They throw out an unnatural light but are necessary for lighting the actors' faces. Many exponents of the modern theatre attempt to stage their plays without

the use of footlights except in the case of light comedy or farce. The usual footlight is a plain white light generally about 50 watts. Amber, blue, and red footlights are also often used.

STRIP LIGHT

These are rows of lights set in troughs. The number of lamps in a strip light may be anywhere from two to twenty or more. Strip lights are used to light backings, hallways, etc. Sometimes they are used below balcony railings to throw a light on a garden drop or a cyclorama. Figure F.

THOUSAND WATT or FLOOD LIGHTS

One of the most useful lights in the theatre is called a flood light. It is usually either a 500 watt or 1000 watt light enclosed in a large square framed case. The interior of the case is generally painted white in order to give a projecting quality to the light. There are grooves in the

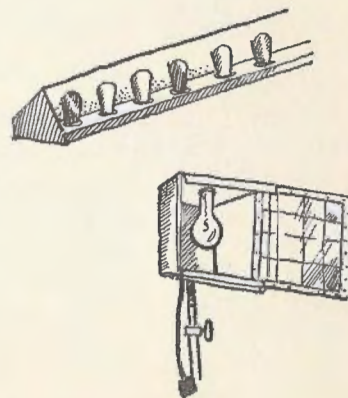


Figure F

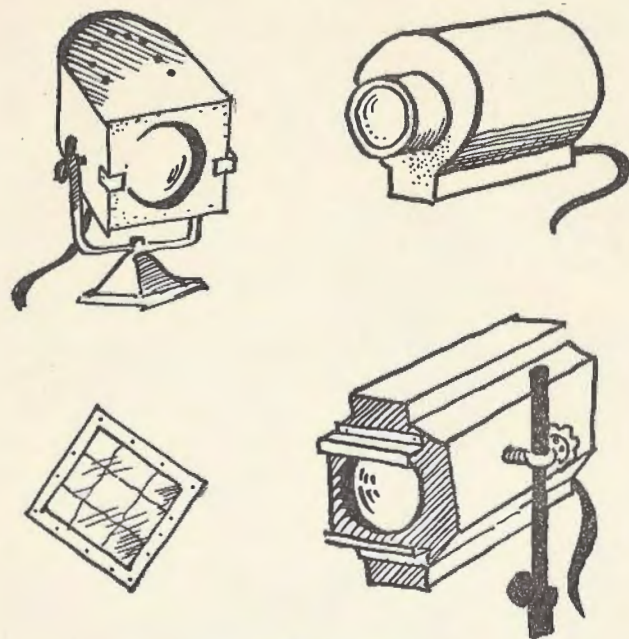


Figure G

frames of these cases in which color slides can be inserted. These lights are used — as the name implies — to flood the stage, set, or cyclorama with light. Flood lights are generally mounted on iron stands and can be raised, lowered, turned, or tilted as the occasion demands. Sometimes several flood lights are chained to a pipe and raised above the stage to act as a powerful border light. This is often done in producing musical comedies, operas, or tableaux as it gives a particularly strong and dazzling light. Figure F.

SPOT LIGHTS

The spot light, invented in 1860, has been gradually developed so that now it is one of the most important lights in the theatre. One or more spot lights are often placed in the concert border in such a position that they will throw a particularly strong light on a certain chair or spot where an important character is to sit or stand. Figure G shows three different types of spotlights.

THE TOWER

A set of spot lights attached to an iron stand mounted on castors is called a tower. Generally, tower lights are employed down stage between the set and the tormentor. They are frequently used to take the place of footlights. Towers are sometimes built with platforms at various heights where operators can stand and control the moving spot lights.

BABY SPOTS

Small sized spot lights are called baby spots. They are sometimes placed in a fireplace so as to throw their rays of light on a particular place.

DIMMERS

Dimmers or rheostats play an important part in the theatre. Many theatres with old-fashioned switch-

boards are not equipped with dimmers. The word *dimmer* explains itself. It is a device which enables the electrician to lower or raise the lights gradually. In melodramas and mystery plays where lights are being constantly extinguished and relighted dimmers are particularly necessary. With a series of dimmers and a small switchboard many of the best effects can be obtained.

EFFECT OF LIGHTS ON CURTAINS

When colored lights are used to illuminate certain colored curtains the effect is sometimes quite unexpected. For example, a red light thrown on a green curtain produces black. The following chart may be useful for the amateur who stages a play with curtains in place of scenery.

CURTAIN AND LIGHT CHART

COLOR OF CURTAINS	LIGHT EFFECT
Black	Remains neutral
White	Takes any color brightly
Gray	Takes any color dimly
Pale Blue	With red appears violet With green appears green With violet appears violet With green & violet appears blue With red & green appears greenish blue
Medium green	With red appears black With green appears green With violet appears deep purple With green & violet appears blue With red & green appears green

 CURTAIN AND LIGHT CHART—*Continued*

COLOR OF CURTAINS	LIGHT EFFECT
Yellow (chrome)	With red appears orange
	With green appears green
	With violet appears black
	With red & green appears yellow
Red (crimson)	With green & violet appears green blue
	With red appears bright red
	With green appears black
	With violet appears violet
	With red & green appears orange
	With green and violet appears deep purple

STAGE EFFECTS

Nearly every play produced requires some off stage effect. It may be nothing more than the familiar "ting-a-ling" of a telephone bell, or it may be an express train dashing past at full speed as in a recent popular play called *THE GHOST TRAIN*. Mystery plays and melodramas usually call for more off stage effects than comedies or dramas. Frequently the success of the play depends on the effects as much as it does on the acting.

For many years theatrical effects were guarded as professional secrets but now-a-days moving pictures and plays dealing with backstage life in the theatre have made the public more or less familiar with the "tricks of the trade". However, the proof that the best methods of producing certain off stage effects are still unknown to the amateur has been shown by the number of people who have asked the authors just how certain effects were produced in some of the mystery plays presented at the Copley Theatre in Boston. During the six months run of *THE GHOST TRAIN* at this theatre in 1927 hundreds of people asked for permission to come back stage and watch how we made the train effect.

Needless to say these hundreds of people could not be given permission to come back stage — there would have been no room for the train if they had — but

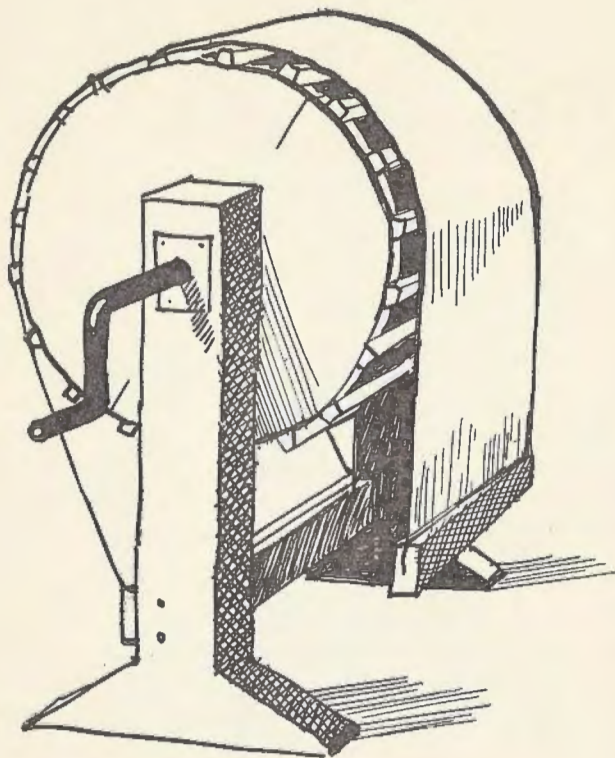


Figure XXXV

there was scarcely a performance that one or two "outsiders" didn't witness the effect.

In the following pages the authors have attempted to describe and picture the commonest off stage effects. There are, of course, other ways — possibly better ways — of obtaining these effects but the following methods are generally accepted in professional theatres.

WIND MACHINE

One of the most popular effects in melodramas and mystery plays is that of a terrific storm raging outside. The stage directions call for the dismal howling of wind, the rattle of windows and doors, etc. To obtain the latter effect the windows and doors are rattled by hand off stage; the howl of the wind comes from a simple machine such as is shown in Figure XXXV.

To make a wind machine take two circles of wood of about two feet in diameter and nail a number of short pieces of wood placed a couple of inches apart to form a drum. A piece of iron pipe, bent at one end to form a handle, will serve for an axle to turn the drum which should be mounted in a wooden frame. A heavy piece of canvass is tacked at one end to the frame and drawn over the drum. The free end of the canvass is weighted. When the drum is revolved it makes a very good imitation of wind,

THUNDER SHEET

Many storm effects not only call for wind but also for thunder, lightning, and rain. The device used for making the sound of thunder is very simple. A large piece of tin is hung from the gridiron off stage. This is called a thunder sheet. By shaking the sheet gently one gets the effect of the low rumbling of distant thunder. The larger the thunder sheet the better the effect. Sometimes padded hammers are used to get the desired effect. If the thunder sheet sounds too "tinny" it is a good idea to rumble a bass drum at the same time the sheet is being shaken. Figure XXXVI.

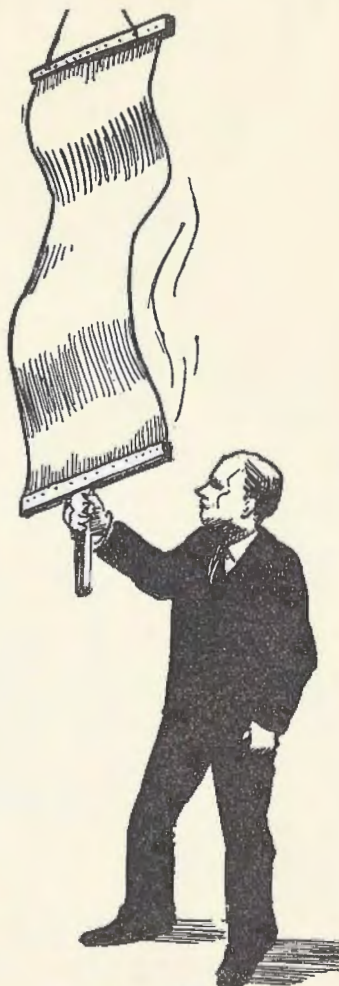


Figure XXXVI

THUNDER BOLTS

Occasionally stage directions call for the effect of lightning striking close at hand. Figure XXXVII shows how the sound for this effect is obtained. A very large heavy chain is suspended from the flyfloor or gridiron off stage. A corrugated piece of sheet iron or tin is placed over an empty metal ash barrel directly under the chain. At the cue the line holding the chain is released and the result is an almost deafening crash — an excellent imitation of a thunder bolt.

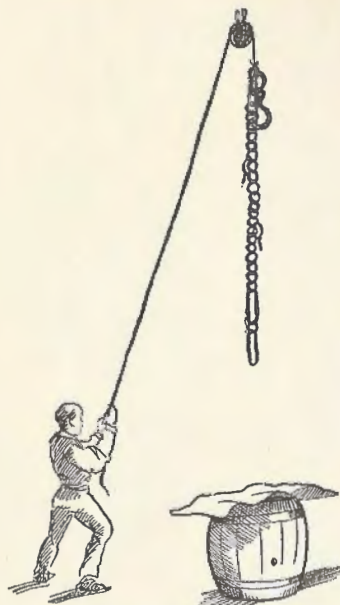


Figure XXXVII

LIGHTNING BOLTS

A wire is run from the flyfloor to the spot on the stage where the lightning is to strike. A small trough or open box that will slide easily along the wire is filled with flashlight powder. The flashlight trigger is arranged at the lower end of the trough so that when the carriage is

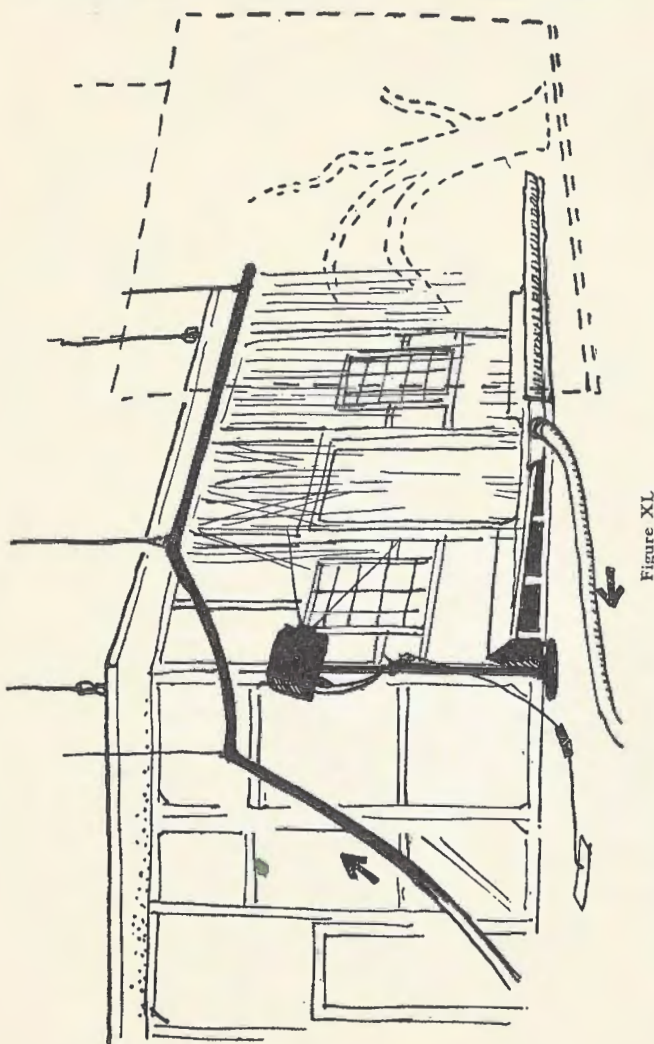


Figure XL

lowered it will slide down the wire and hit the stage and ignite the powder. The end of the wire on the stage should, of course, be masked from the audience. This effect is very realistic when used on a dimly lighted set.

RAIN EFFECTS

One of the best and simplest rain effects is illustrated in Figure XXXVIII. A tin tray and a handful of buck-shot are all that is necessary. The tray is tilted gently from side to side and the buck-shot roll about with a noise much akin to a rain storm.

Sometimes when there is a real window used in a scene actual water can be used to produce a rain effect. If the rain storm is supposed to be particularly severe the rain effect can be heightened by throwing handfuls of buck-shot against the window-pane.

Figure XL illustrates a real water effect. This method is easily worked out with the assistance of a



Figure XXXVIII

plumber if expense does not have to be considered. The very successful play of recent years called "RAIN" used an effect similar to this.

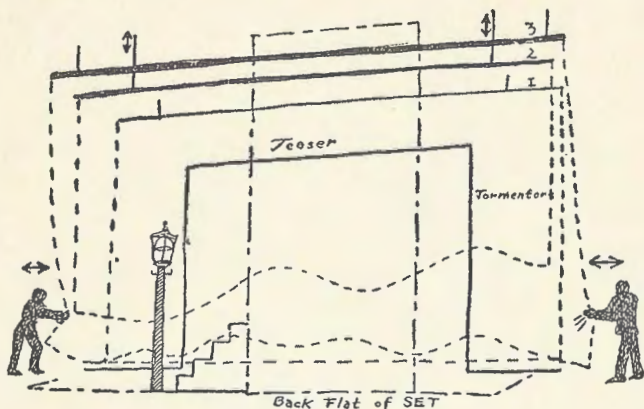


Figure IXL

LIGHTNING

There are several different ways of producing the effect of lightning. The commonest method is by striking a piece of carbon against an electrically heated red hot wire. Flashlight powder is also used very successfully as it gives a blinding flash not unlike the real thing.

FOG EFFECTS

Not infrequently the stage directions of a play call for a fog effect. There are several ways of producing

this effect rather realistically. The simplest method is by hanging a gauze curtain downstage against the tormentors and blowing or fanning smoke from smoke-pots off stage, left and right, across the scene. The chief objection to this method, however, is that the smoke may cause the actors and the audience to cough.

Figure IXL shows the best method. Three gauze curtains are used. The one nearest the tormentors remains stationary. Gauze curtain number 2 and number 3 move. Number 2 is raised and lowered at various intervals from the flyfloor. Number 3 is pulled from side to side as desired. It is well when using this method to light the stage from borders hung between curtains 2 and 3. Spotlights may be used upstage where they will not illuminate the gauzes.

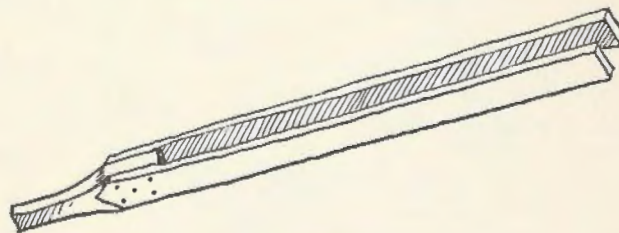


Figure IVL

SLAP STICK

In burlesques and pantomimes a slap stick is often called for. Figure IVL shows a slap stick. Sometimes a torpedo is placed between the two strips of wood.

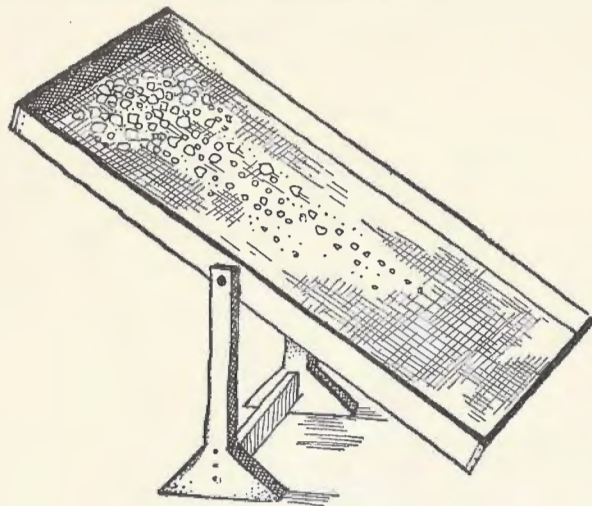


Figure XLII

ROLLING SURF EFFECT

Certain plays require an atmosphere of the sea. To obtain an effect of the pounding of the surf on the beach is not very difficult. Figure XLII shows how this is done. A long wooden frame with a bottom and top of wire screen is hung on a wooden frame. A couple of quarts of dried peas inside the frame roll from one end to the other when the frame is tilted. The sound is identical with that of a heavy surf rolling up on a beach.

TELEPHONE BELL

Nearly every modern play has at least one or more cues for a telephone to ring on stage. This is usually

done by having an electric bell concealed in the footlights and a push button switch off stage near the prompt desk.

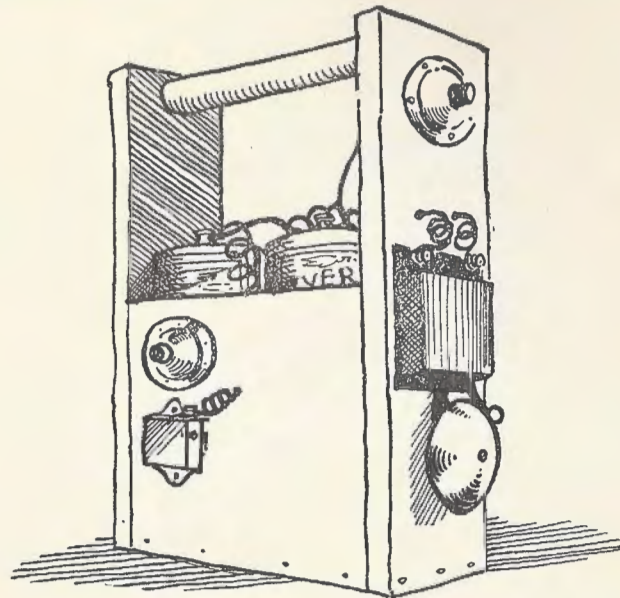


Figure XLIII

DOOR BELL

Two dry cell batteries, an electric bell, and a switch are connected in a small box or case as shown in Figure XLIII. Sometimes a buzzer is also attached to the case. This device is very convenient as it can be carried easily to the various parts of the stage.

CHIMES

Three or four chimes are suspended to a rack off stage. A padded wooden mallet can make the chimes sound either nearby or distant as desired. A single chime is generally used for the striking of a distant clock.



Figure XLIV

DOOR SLAM

A heavy wooden plank with a short rope attached to one end is all that is required to make a door slam. See Figure XLIV.

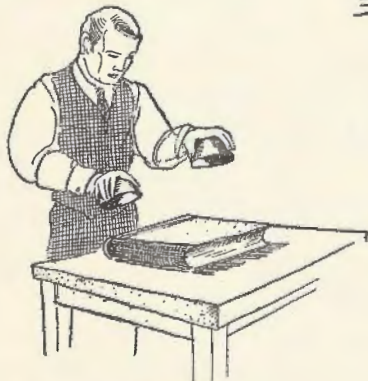


Figure XLV

HORSES' HOOFS

The effect of horses' hoof beats is obtained by pounding two empty coconut shells on a large book. See Figure XLV.

GLASS CRASH

This effect is nothing more than a box filled with pieces of broken glass, old bottles, etc. On the cue the broken glass is poured from one box into another. See Figure XLVII.

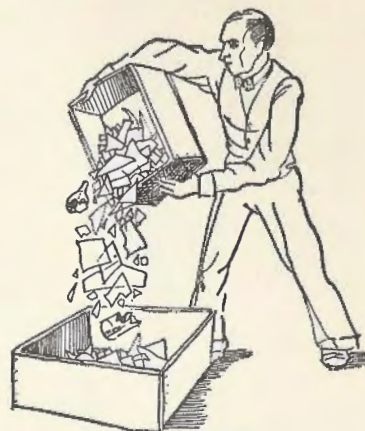


Figure XLVII

EXPLOSIONS

Blank cartridges are fired from a large shotgun into an empty ash barrel. To make an explosion even more realistic red fire is often lighted outside of windows after shooting the gun in the barrel.

REVOLVER SHOTS

When a character on the stage is required to fire a revolver the stage manager should stand by with another revolver in case the actor's gun misses fire. Sometimes a bullet is supposed to strike a certain picture. This is done by having the stage manager or his assistant stand in back of the flat where the picture is hung and when the revolver is fired the stage manager hits the canvas in back of the picture with a

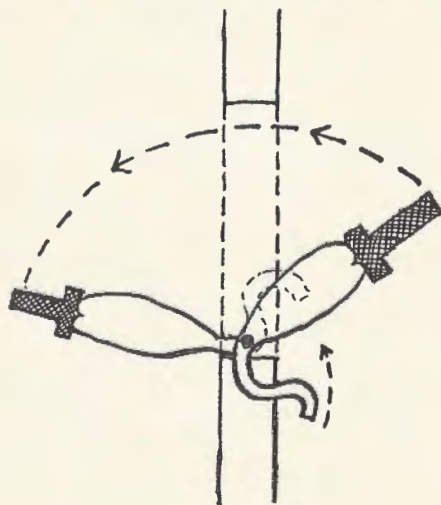
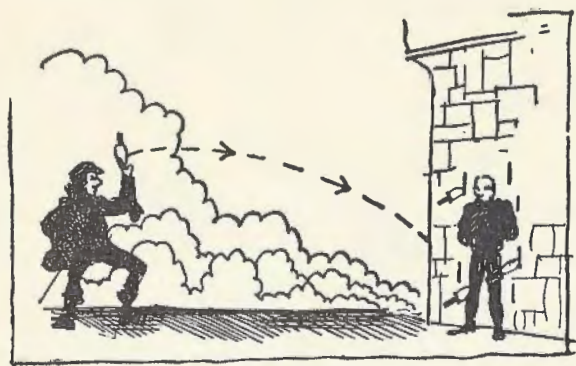


Figure L

hammer. See Figure XLVIII. Sometimes the shot is supposed to hit a wineglass or a bottle or some other object that will break easily. This is done with a little

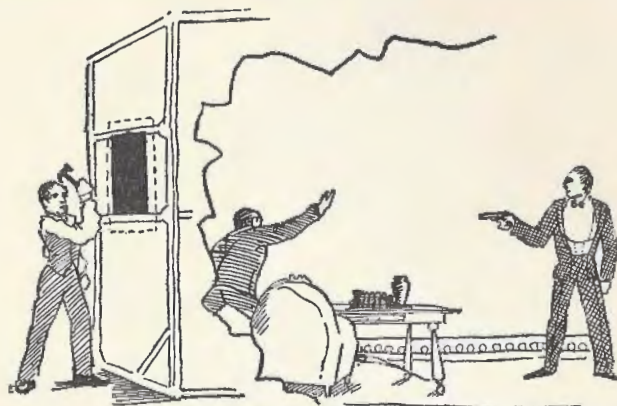


Figure XLVIII

device something like a spring mousetrap. The spring is released electrically by the stage manager off stage. See Figure XLIX. This effect cannot be recommended, unless it is absolutely necessary to the plot of the play, because of the danger of the broken glass flying about the stage.

KNIFE THROWING

Plays seldom call for this effect. It is more often seen on the vaudeville stage. However, once in a blue moon, the action of a play calls for a knife to be thrown at some character and to stick into the wall. Figure L illustrates how to do this without endangering the lives of the actors.

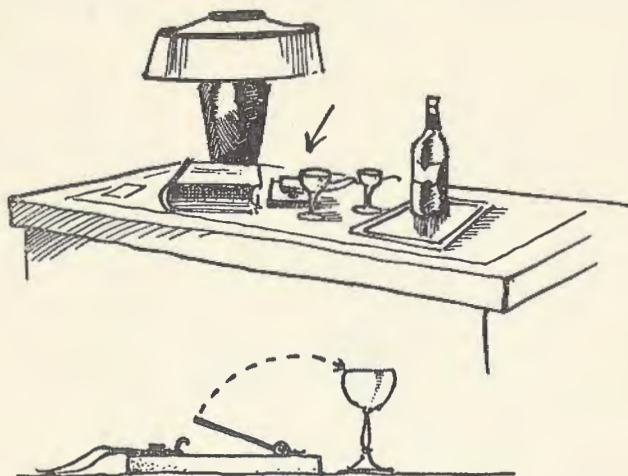


Figure XLIX

KNIFE STABBING

This effect is a little more common than the one previously described. Knives, such as the one illustrated in Figure LI, may be bought. The blade, which is really not as sharp as it looks, pushes up into the handle

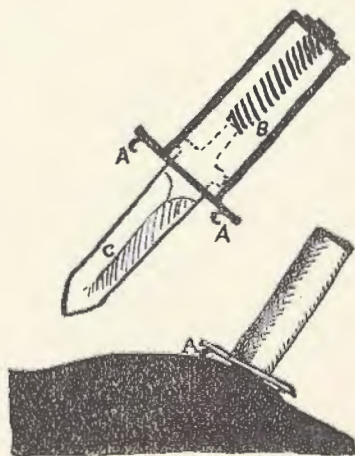


Figure LI

and is held there by the two little fish-hooks being caught in the coat or dress of the person stabbed.

GUILLOTINE

This is another effect that is seldom called for. Still, since we are describing murderous effects, it

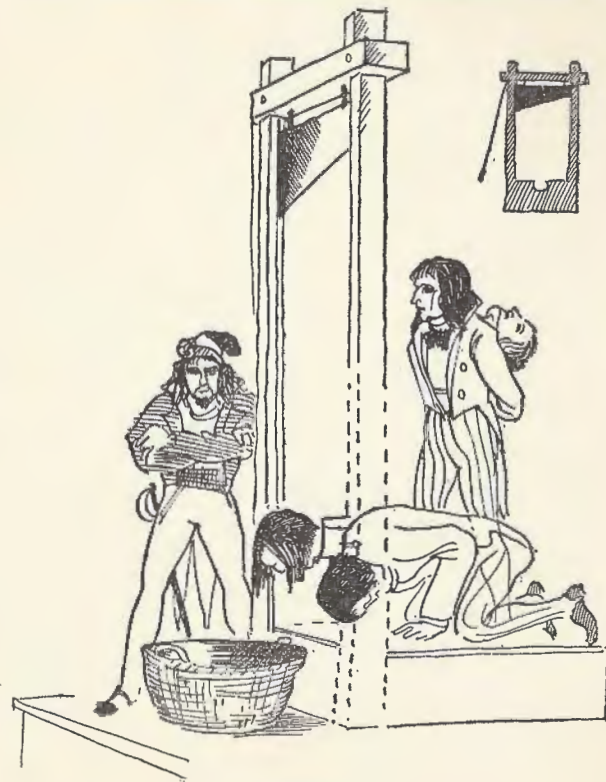


Figure LII

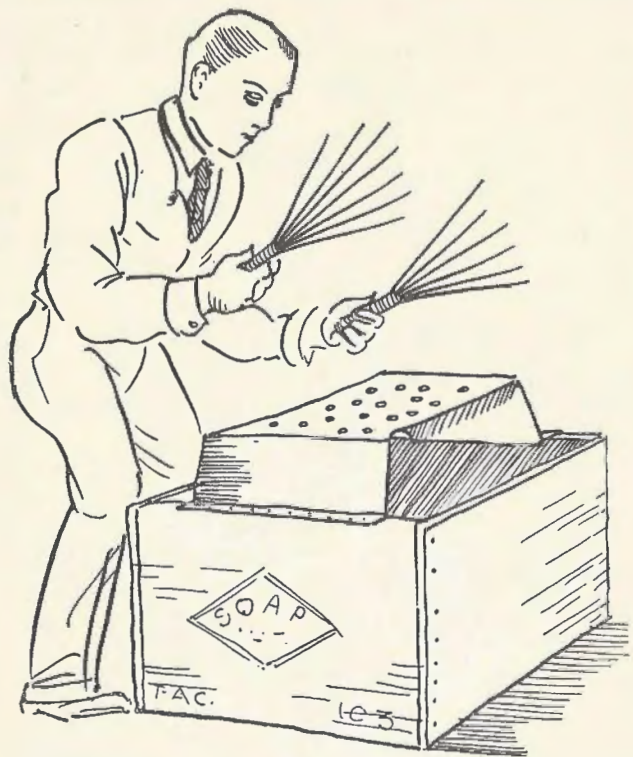


Figure LIII

might be well to include this. The character to be guillotined has a paper mache head attached to his collar band. Of course the character must face the audience so the imitation head is not seen. When he kneels down he throws the paper head into position putting his own head behind the low board. The

executioner drops the cardboard knife and the fake head falls in the basket. Figure LII.

TRAIN EFFECT

One of the reasons why the play *THE GHOST TRAIN* was so successful at the Copley Theatre in Boston was due to the remarkable train effect. It required the services of five men to produce this train effect but it was certainly worth it. At the opening of the first act a train coming from a distance pulls into the little railroad junction, stops to let off passengers and baggage, and then starts off again with a roar and then dies off again in the distance. To obtain this effect a trap-drummer started beating very softly on a piece of galvanized iron with holes cut in it. See Figure LIII. The stage manager blew on a wooden whistle — softly like a distant train whistle. Gradually the drummer increased the beating on the galvanized iron — louder — louder. After a few moments another man began to slowly turn a truck mounted on heavy castors that revolved on a platform of corrugated iron. See Figure LIV. Another man started beating a heavy bass drum. As the noise of the approaching train became louder, another truck on castors was revolved — this made the effect of the train wheels passing over the rails. The stage manager blew several loud shrieks on a siren whistle attached to a tank of compressed air. When the noise reached full volume the stage manager gave a signal and all the effects were brought to a quick stop. The train

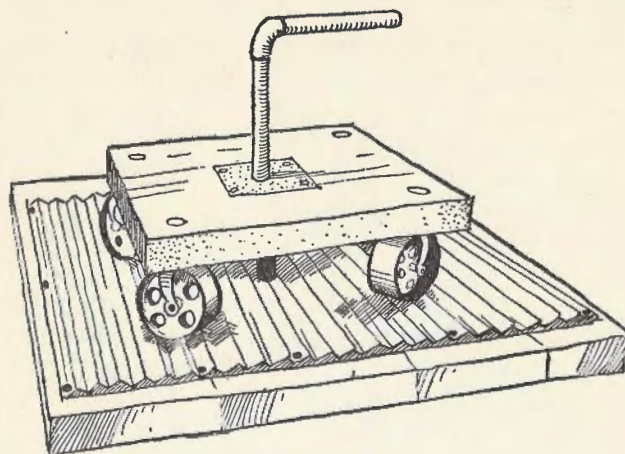


Figure LIV

was supposed to have arrived. Only the drummer continued his effect while the train was stopping. Instead of beating he brushed his wire beater across his galvanized iron drum giving forth a sound something like escaping steam. On the cue for the train to start all the effects were started at the same time and then gradually toned down and stopped as the train died off in the distance.

AUTOMOBILE EFFECTS (Comedy)

- (a) Auto being started.
- (b) Auto speeding away.
- (c) Auto approaching.
- (d) Auto stopping.
- (e) Auto missing fire.
- (f) Auto stalling.

The effect (a) of the auto being started may be done with a wooden rattle, or any novelty toy which will represent a starter. The effect (b) is done with varnish cans of different sizes, filled with marbles. By shaking them, the sound of loose fenders will be produced. A clank of metal may be added for an artistic touch. The effect (c) of the auto approaching is the reverse of (b).

The effect (d) of the auto stopped may be done with the familiar resined string on a tin can. A good touch is a terminating "pop" from a pop-gun. Effect (e) of the auto missing fire may be done with the varnish cans in action, supplemented with intermittent croaks from a broken whistle or horn. Effect (f) of the auto stalling may be done with a piston whistle, by sounding a note in the descending scale, like a last expiring gasp.

(a) must be merged smoothly into (b); likewise (c) into (d); and (e) into (f). Needless to add, these effects must be given thorough rehearsals, to keep them down to the proper volume.

MOVING BOAT

Figure LV illustrates the effect of a small boat on a rough sea. A ground row painted like sea waves stands against the tormentors. A sea cloth is tacked to this ground row and men off stage or underneath it can shake it to give the effect of a rough sea. The boat is mounted on a truck with wheels on castors and is pulled slowly with ropes across the stage. This

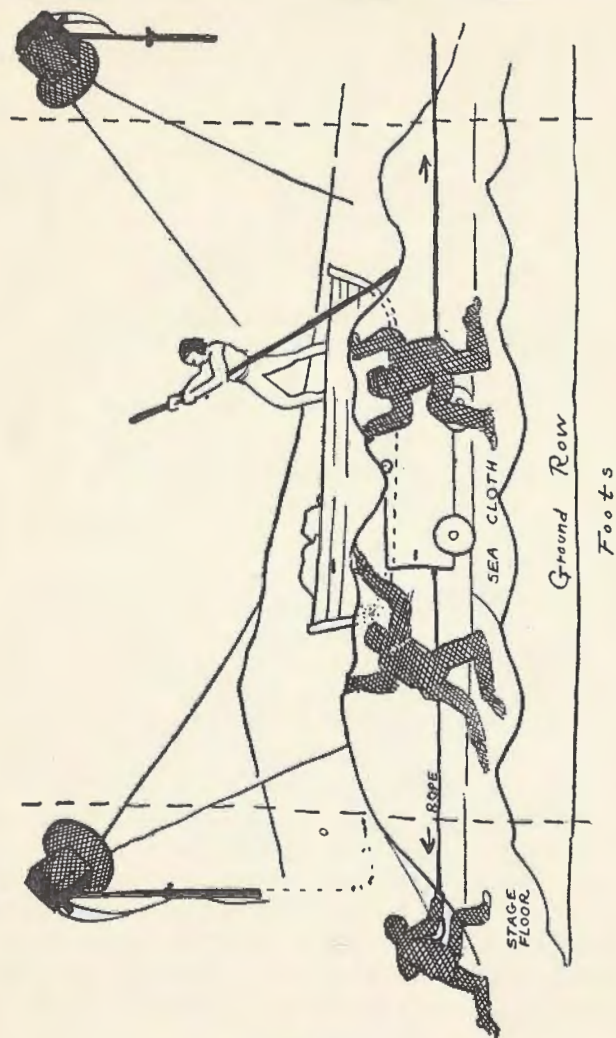


Figure LV

is a very old effect and was frequently used in the early melodramas.

LAMPS

An oil lamp can be turned into an electric lamp with batteries and a rheostat in the base as shown in Figure LVI. This is a very convenient and safe effect when the stage business calls for a lamp that can be turned down or turned up easily.

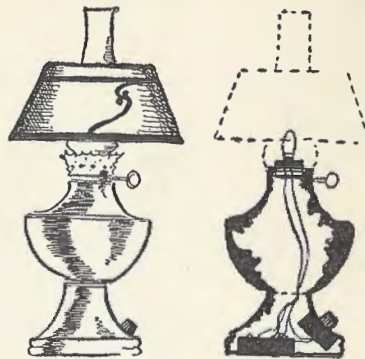


Figure LVI

GHOST OVER AUDIENCE EFFECT

This is a very startling effect and has been employed in hundreds of mystery plays and melodramas.

This effect can only be used when all the exit lights in the theatre are temporarily turned out. The stage must be in darkness. The man who performs the trick may have to wear dark clothes — gloves and mask as the front of the audience may possibly have cigarette lighters that they might light to flash to disclose the trick. The man has a long bamboo pole painted black. On its end there is fastened a wire frame not unlike a

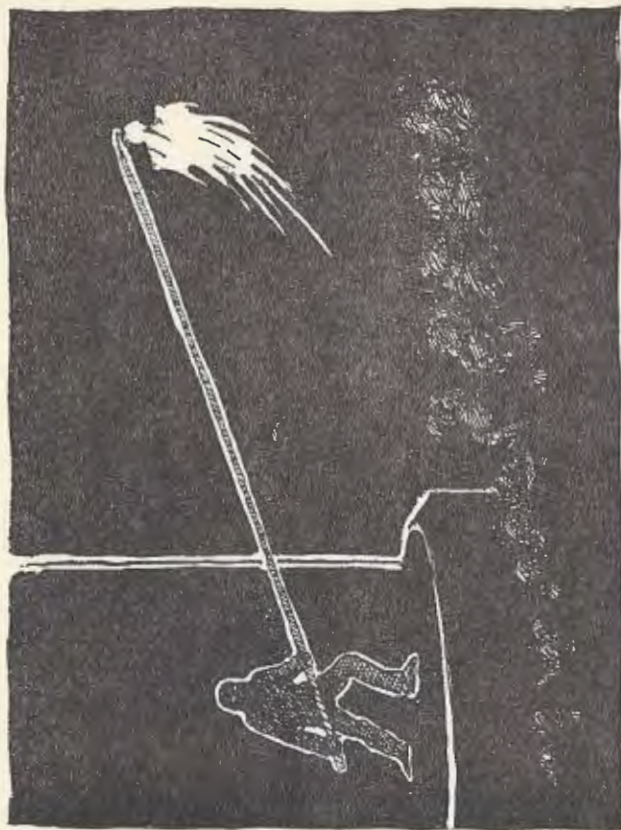


Figure LXI

Figure LVII

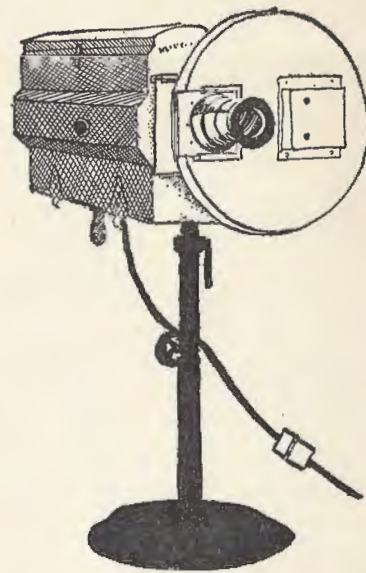


Figure LVIII

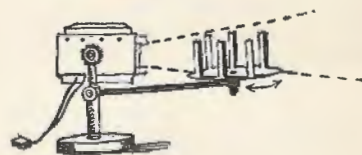
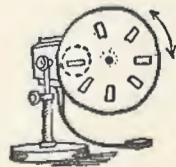


Figure LIX

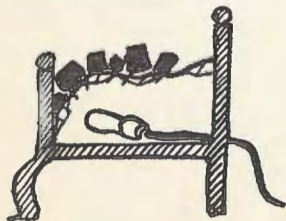
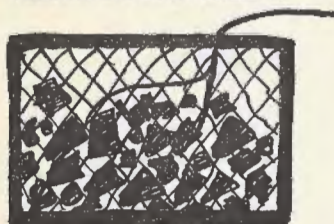
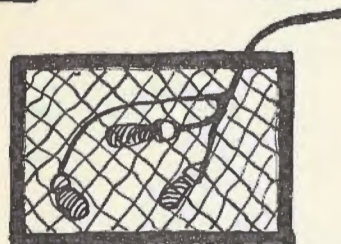
coat hanger but bent to form a head-like effect. Sewed to this frame of wire is a long piece of chiffon which has been painted with luminous paint. This is the only thing that is visible to the audience and as the man waves his stick to right or left the ghost floats easily in space. Figure LXI shows this effect.

MOVING EFFECTS

Figure LVII shows a machine for making cloud effects. Machines of this kind can be rented. Figure LVIII is a machine for throwing flashes



of light such as might come from the car windows of a moving train. Figure LIX shows a different method for obtaining the same effect.



FIREPLACES

Figure LX shows how to make a coal grate for a fireplace. Colored electric lights are placed in the grate and then covered over with a wire screen which is painted black and partly covered with pieces of coal.

Figure LX