# SPECIAL EFFECTS-PROPS

Properties, or "props," are crucial design elements for stage productions. Anything an actor handles, carries, or manipulates that is not attached to the walls or floors is considered a stage prop. Because actors interact with props, they are also elements that the audience often pays close attention to. They are highly visible and equally important to storytelling, so careful attention must be paid to their selection and function.

Stage props are broken down into several categories. The **first** is **set props**. Set props include furniture and large-scale elements that may be moved by an actor or technician during the show. The **second** category of properties is **set dressings**, also known as "decorative props." Set dressings include items such as wall art, window curtains, and shelves of books. These items are decorative in nature and are not typically handled during the performance. The final categories are hand props and personal props. Hand props are handled by performers and can be almost anything from something as simple as a pencil, to something more complex like a weapon, to anything in between. Hand props must be durable enough to be used throughout the technical rehearsals and run of a production. They must also be easy to use for the actor or technician who operates them. **Personal props** are a subset of **hand props** and are items of a personal nature that enhance a character. Often these items are chosen in concert with the costume designer. Sometimes personal props stay with the actors costume and are always carried by the actor during the production. These items include things such as cigarettes and lighters, wallets, combs, and parasols.

Some play scripts include a **properties list** of items needed for production. Often, this list is reprinted from a professional production and includes the properties from that incarnation of the show. If a list is not provided, one can be created through a careful close reading of the script, noting each item required for the scenes. Prop lists of this type are created by the scenic designer or, if involved, a prop designer. Once a list of required items has been made, any research needed to clarify the look and function of items can be done. Many plays take place at a certain historical period of time. We refer to this as "period drama." If your play recreates the feeling of an historic era onstage, then many of your prop elements could be things that you are unfamiliar with. They are also likely to be much harder to find than a modern item. Period props may have to be researched and built from scratch rather than located.

Even if all of the needed items are commonly available, most props used in a live production have been altered in some way to make them "stage worthy." Plays tend to be written about extraordinary moments in the lives of their characters, moments in which the characters are on the precipice of some great undertaking or struggle. In these moments the characters often behave extraordinarily. They stand on chairs, slam doors, throw glassware, or dance on tables. The props of the show must be able to withstand this unusual usage, show after show. Chairs, tables, and other household items are often reinforced for stage use. Remember, borrowed items must be well cared for and alterations to them may not be possible.

**Consider This** Several types of prop artisans are common to the theatre. Each individual has a special skill and methodology for the creation or acquisition and delivery of the needed items for a production. Often props can be purchased for a show from retailers, thrift stores, and online sources. Some prop masters are brilliant at sourcing items and can find whatever may be required. These people tend to be great researchers and will search tirelessly for items they

need. Others are builders and will likely try to create the bulk of the required items. These artists are masters of a wide variety of materials, construction techniques, and paint effects. All prop masters must have strong organizational skills. Prop tracking lists can be very complex, and constant communication with the rehearsal room and shops about the evolving needs for props is vital.

The scenic designer and props designer provide visual research to the director and prop artisans for planned props. During the rehearsal process, actors are given approximations of the show props that will be used for performances in order for them to become familiar with those items and incorporate them into their performances. These **rehearsal props** should mimic the actual intended prop as closely as possible in scale, weight, and function. Prop masters usually do not include actual show props in rehearsal rooms for fear of loss or damage. Rehearsal props are naturally subject to some abuse as the actors actively explore their potential use in the production.

Once the needed props have been established, collected, and altered for stage use, they are ready to be used in technical rehearsals. Props are set out, maintained, cleaned, and stored by the prop crew or backstage run crew. Usually, long tables are set backstage near entrances and exits and props are arranged on these tables for quick access by cast and crew. These tables can be covered in butcher paper so props can be kept track of by drawing a line around them and labeling the place on the table where they sit. Further organization can be achieved by using tape to outline sections of the table and labeling them by scene or by actor. This system allows for all items to be placed in the same area for easy location and identification as well as provide visual shorthand to recognize any missing items from the table prior to a performance. Once props have been set for a performance, both the stage manager and the actors perform a "prop check" to visually check to ensure everything needed is ready to go.

**There's More to Know** Common prop elements such as glassware, silverware, and dishes must be carefully washed after each performance so that germs are not passed among the cast. Items like pipes or cigarette holders should be carefully labeled so they are not shared by multiple performers. All food and beverages should be refrigerated to keep them fresh and safe. In addition, people working on a production are often subject to health issues as they are getting enough rest and are stressed during production periods. Anything you can do to keep everyone healthy is a worthwhile investment.

Food and drink props are common to the theatre. The prop master should ask the stage manager to survey the entire cast who touch or eat any food or drink props, or **consumables**, to discover any dietary restrictions and allergies. Whatever is ultimately chosen for the food prop seen onstage needs to be something that no one will have a negative reaction to and can be kept hot or cold accordingly and handled safely for each performance.

The term "consumable" can also be applied to anything used up or destroyed during a performance such as burning letters or blank ammunition that is fired. Confetti is also considered a consumable. Breaking down these items into their own subcategory helps us to track amounts required and the cost of these items for each performance as well as for the entire rehearsal period and run of shows.

**There's More to Know** Blank-firing weapons are guns that have had their barrel plugged and are not able to be loaded with a live round. These weapons are available in many styles and calibers to match common and period weapons. All replica weapons must be treated with

respect and great care. Theatres should have a procedure in place for exactly how the weapon will be used and accounted for. Weapons should be kept under lock and key as much as possible, and only personnel who need to handle the weapon should be allowed to do so. Although a piece of blank ammunition does not have a bullet as a projectile, it is still a controlled explosion occurring in the chamber of the weapon and may propel it's wadding and other debris at the speed of a bullet. When this explosion occurs, an envelope of hot gas and burning powder flashes out in all directions from the barrel, creating potential danger for anyone in proximity to the weapon. Blank loads are also very loud. The hearing of anyone in proximity to the weapon when fired should be protected.

Weapons are also prop-based special effects that need special care and attention. They are common to many theatre productions, and, although they have always been dangerous items to manage, the current problems facing our society in regards to public shootings have made even handling a plastic replica gun a danger for any public performance. When a blank-firing weapon is used on stage, specific training for the entire company occurs in order to ensure that everyone knows how to stay safe around such an effect. It should also be said that a weapon capable of holding a live round rather than a blank should NEVER be used in a production. Other weapons such as swords, daggers, and even kitchen knives should always have their edges dulled and tips blunted for general safety.

**Special effects** are associated with props. Often special effects rely on motors and machinery, and so they are also considerations for the set and lighting designer. Common theatre special effects include atmospheric effects such as theatrical fog and haze and practical effects such as snow, rain, and fire.

The responsibilities of special effects are often shared between several production departments. Water effects such as rain, ponds, showers, and sinks often involve the master electrician, both for the installation of associated electrical equipment for pumps, filters, and heaters, but also, from a safety standpoint, their expertise is needed as water and electricity don't mix well and can add up to significant danger. When needed, a constant pressure flow to practical faucets might be accomplished via a hose to an existing water source or by creating a closed pressurized system by using a garden sprayer.

Weather-based effects have been used in theatre for many years. Thunder, though now usually recreated with a recorded sound effect, was traditionally created using a "thunder sheet," a large sheet of thin metal that was struck or distorted to produce the sound. Practical rain can be accomplished by a system that is essentially an overhead sprinkler system. However, containing and circulating water is a tricky undertaking and has huge implications for electrical safety.

Fire effects are another area that requires specific expertise to produce a reliable and safe effect. Any live flame likely requires a special permit to be granted by your local fire marshal. Permits for small naked flames, such as those from a candle, match, or cigarette lighter, are reasonably common requests, and depending on your specific production, may be fairly easy to acquire if the proper conditions and procedures are met. LED candles and battery operated torches and fire effects have become quite convincing and are commonly available as practical and safe alternatives to live flame. Audiences today are often very put off by smoking of any kind onstage. They have become very accepting of miming smoking without ever actually lighting a prop cigarette. Non-nicotine e-cigarettes can also be a convincing alternative.

Unlike rain, snow is a fairly easy effect to achieve onstage with convincing results. A **snow cradle** is rigged from a batten above the effect area. The cradle is then manipulated to drop a snow-like substance. Depending on your needs, a manufactured snowflake product made from plastic, Styrofoam beads (static causes these to stick

to everything), or even dried potato flakes could be used. Snow cradles are also often used to drop flower petals or confetti. Snow machines that produce miniature soap bubbles are also convincing, but the collected soap can be slippery on the stage floor.

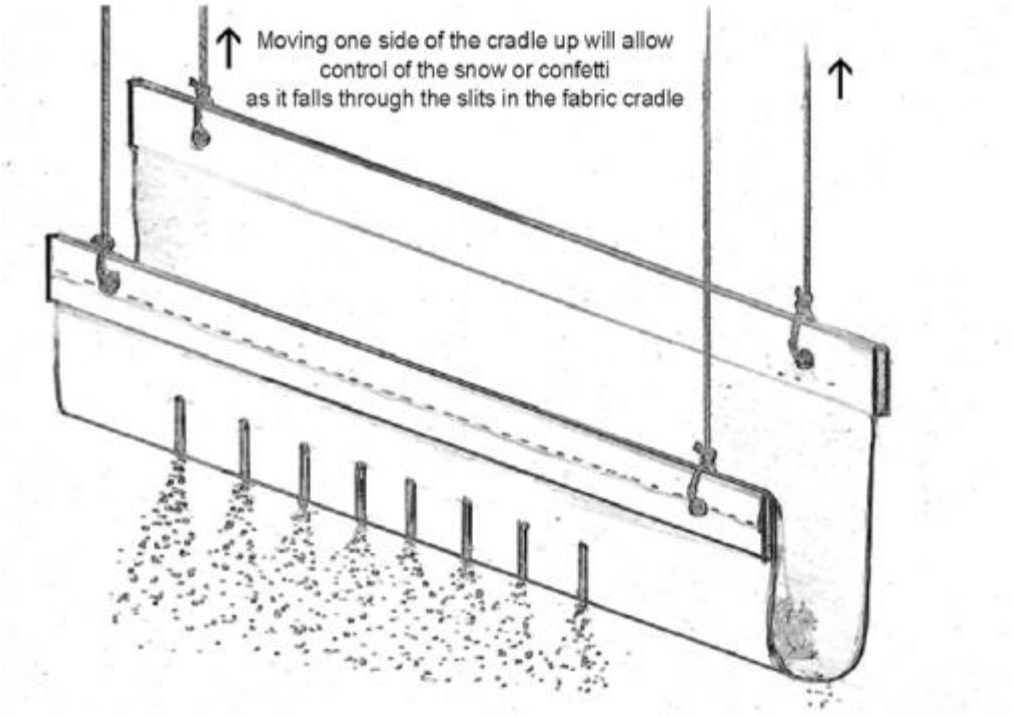


Figure 1.8.11.8.1: A simple fabric snow cradle

**Breakaway** props like **sugar-glass** bottles or glassware are common for fight scenes and are commercially available. These props require careful planning with the performers to keep everyone safe. The production needs to order enough of these expendable items for sufficient experimentation and practice. It is possible for an experienced prop artisan to make custom sugar-glass items for a production, but it has become an expensive and time-consuming endeavor.

**Consider This** When glassware is required onstage, it is often advisable to use a plastic or acrylic alternative to actual, breakable glass. Unless you are "clinking" glasses, they will be convincing replacements and can prevent what otherwise can be both a safety hazard and a time-consuming cleanup onstage.

Breakaway furniture and collapsing crates may be made either from a soft wood such as balsa, or can be pre-broken and held together lightly so actors won't be injured by their impact. Many extra breakaway objects should be kept on standby and for rehearsals.

Productions using weaponry or breakaway props and furniture also require an expert in **stage combat** to work with the cast and crew to carefully plan the actions involved so they are convincing for the audience as well as repeatable and safe.

Atmospheric effects, such as fog, smoke, and haze, have become very common to in productions. Theatrical fog can be produced in several ways. Fog machines that vaporize a liquid by heating it are used frequently. These units are safe, reliable, and inexpensive to run. This type of fog can be run through a cooling unit, which allows it to hang or drop toward the floor rather than rise as a vapor. Dry ice (CO2) can be employed to create a cool fog that falls and hugs the stage floor. Liquid nitrogen can also be used to produce a pressurized fog effect that can be useful for magic appearances. Smoke and **smoke machines** are often used as interchangeable terms with fog, though smoke effects should accurately be categorized as pyrotechnic effects. Haze is used to thicken the stage atmosphere. It allows the lighting instruments' beams to be seen. The look of a rock concert is achieved through the use of haze. **Hazer** units are similar to fog machines but continuously put out a light vapor distributed over a large area.

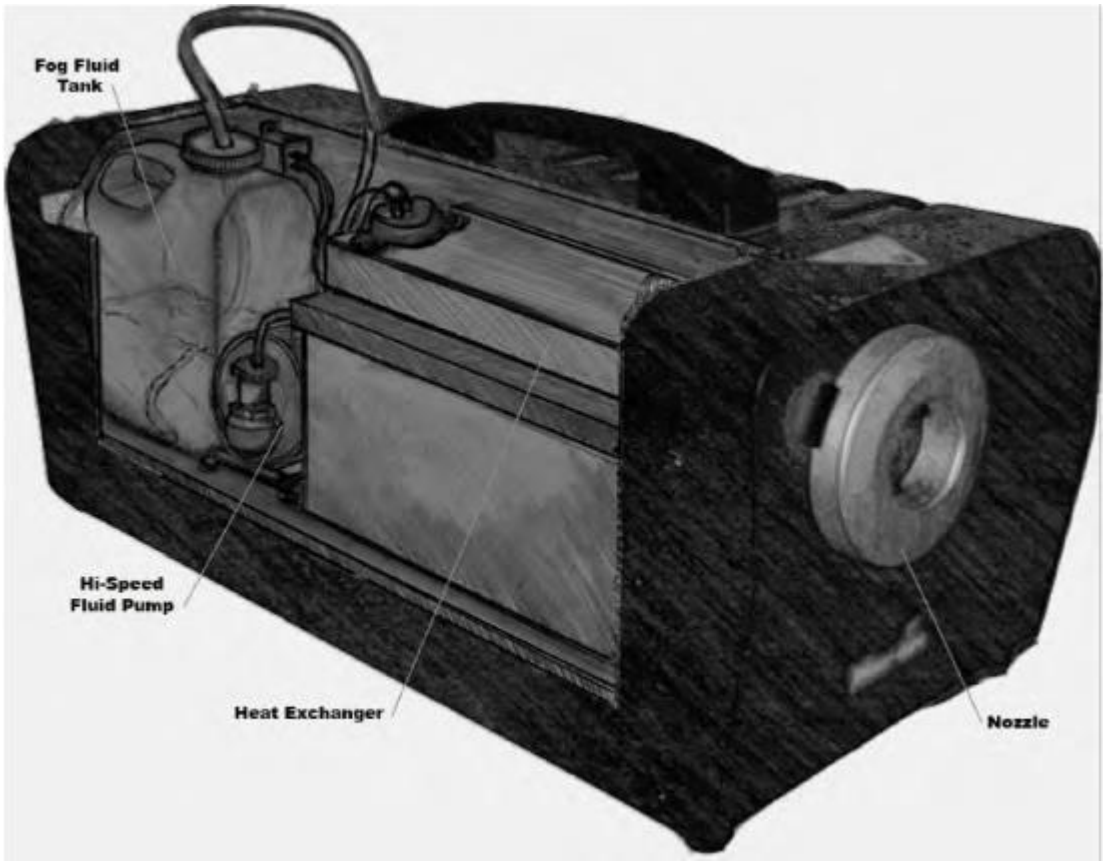


Figure 1.8.11.8.1: A fog machine