FOAM PROSTHETICS—PART 1

MAKING A LIFE MASK

by BILL SCHWARZ

I've always been interested in films -- especially fantasy ones. At the age of ten I really began to notice the technical processes that were involved in certain films. So when my father bought a movie camera, I was the first to use it. Soon I began to attempt various special effects and make-up techniques, though some didn't work, so I set out to improve them. During the next several years, through trial and error, I obtained only a minimum of success. Then in 1968 I saw PLANET OF THE APES, and wrote to John Chambers, who did the APES make-up. During a series of communications with him (and by reading), I developed a foam latex process for make-up based on Chambers' techniques. This eventually led to a series of television appearances (both acting and doing make-up) on local stations in Philadelphia, and a couple of trips to the West Coast to view some of the actual Chambers techniques first hand (during the filming of CONQUEST OF THE PLANET OF THE APES).

The following article (and subsequent ones) is based on what I have learned of this fascinating medium.

Many film buffs who have viewed the early Universal horror films such as the Frankenstein series, the Wolfman, the Mummy, etc. will probably realize that the fabulous make-up creations in these films were spear-headed by a great artist named Jack Pierce. With putty, pancake, and fuller's earth he created and brought to life creatures and man-things of horror and fantasy. But time was against him, and in 1939, a new breed of make-up materials came into play in a now classic film. That film was WIZARD OF OZ, and the material was a type of sponge rubber. The face of the Cowardly Lion, the jaw and nose of the Tin Man, the neck area of the Straw Man and the muzzles of those sinister little flying monkeys, along with the nose of their leader, the Wicked Witch of the West, were all created from this material. This, of course, outmoded a lot of Pierce's more primitive, non-flexible materials. And this brings up an interesting point. Let's suppose that Pierce had mastered the use of sponge rubber, or as we call it today, foam latex. Imagine the impact of the Frankenstein monster, for instance, if he were able to wrinkle his brow and convey a greater number of expressions. Now I'm not saying that there was anything wrong with Pierce's work, but this example serves to show how such early creations could have been further enhanced by the use of foam latex.

Speaking in terms of films today, foam latex is now an established make-up material in all major studios. There are many experts in this field working for the various studio make-up departments, and some who are independent specialists called upon to solve difficult problems.

But what of amateur filmmakers? Where do they get the materials needed to create such make-up for their films? How do they learn the techniques involved? Well, it's not as difficult as it seems. The trick is the proper choice and use of specific materials, many of which can be bought at hardware and drug stores.

Before I get into that, though, let me supply a few make-up materials definitions. During the course of my articles there will be some specific terms you should be familiar with:

SPONGE RUBBER: a soft, pliable latex material that is produced from a liquid latex which has been chemically treated, whipped to a certain volume in a beater or electric mixer, then processed at accelerated temperatures in a curing oven.

FOAM LATEX: modern name for sponge rubber, and the one I'll be using in my writing.

PROSTHETIC: an artificial part or feature; can be facial or any limb or area of the body. (In surgical terms, this can apply to a false replacement for a missing anatomical feature.)

IMPRESSION MATERIAL: any cream-like substance used to make a mold of the face or body (Moulage, Alginate, etc.)

LIFE MASK: the plaster copy of a human face or feature (or of an animal, for that matter) that is made using the impression materials.

CASTING STONE: any of a group of hard, plaster-like materials used in various steps of the mold-making process.
PLASTILINE CLAY: soft, oil-base clay used to create a feature that will be molded in plaster or casting stone.

APPLIANCE: the finished foam rubber piece that has been cured and is ready to apply to the subject.

That should take care of major definitions for now. If I use new words from time to time, an explanation of them will be included. But now, let's get to the work at hand.

**IMPRESSION MATERIALS**

First of all you'll have to get some impression materials. These are various powders that are mixed with water to form a creamy molding material that can be used on the face or body. You may have already had an experience or two with this substance whether you know it or not, because this is essentially what your dentist used the last time you had dental impressions made. The kind he uses is called "alginate" and goes by many brand names (Dental Perfection, Jeltate, etc.), and is available at most dental supply houses.

Now, you must find yourself a willing subject. Let's say you're making an entire facial prosthetic for this person. You'll need a mold of his (or her) whole face. To accomplish this, have the person sit in the position in which he will finally be performing with the appliance, place a cap on his head (the bald caps sold in joke stores or five and ten-cent stores work well), then mix the alginate with water. Once you've done this you'll have to work fast, but thoroughly. (One thing that keeps the alginate from setting too fast is the addition of cold water.) Now scoop some alginate up in your left hand and begin to apply it to the face with the right hand (PHOTO 1). Work steadily and make sure every crevice of the face is covered, but avoid blockage of the nostrils. Once you've accomplished this, you'll need some plaster of Paris to put over the alginate (PHOTO 2). Since the alginate is so soft and rubbery, it will never stand up by itself, so the plaster shell (or Mother Mold, as it is sometimes called) is cast around it to form a protective outer coating to keep the inner alginate one from changing shape after removal from the face. The plaster should be mixed relatively thick to afford fast, hard setting. (This also helps in getting the person out from under his temporary prison much faster.)

When you've finished the Mother Mold, you must carefully remove the plaster and the alginate casts together from the subject's face. Now turn the whole arrangement over and you'll have a negative mold of the person's face (PHOTO 3). This will be the basis of the positive cast or mold.
POSITIVE MOLD

For this step you'll need some casting stone. This is a very hard plaster available from various dental supply companies. Mix the stone and pour it into the negative mold you made earlier with alginate and plaster. (Make sure you do this step as soon as possible after making the alginate cast, because alginate tends to shrink after a time and if you wait too long, your impression will be false.) Smooth the casting stone with your hand (PHOTO 4), and gently push it against the negative mold with your fist (PHOTO 5) to insure a good impression.

After it has set, carefully remove your cast from the alginate-Mother Mold combination. You will find that the alginate usually tears, but you can use it again, anyway. At any rate, you should now have a well-formed stone likeness of the person who posed for the mold (PHOTO 6).

Now you have a bit of insight into the creation of your first life mask. This will eventually become the working surface for an appliance and later will serve as half of the mold from which you'll be able to make numerous copies of the appliance. Practice is important with the like mask because it is probably the most difficult part of the entire process.

In CINEMAGIC #2 I'll show you how to take these life masks and use them as the base for a clay sculpture that will be the original model for a foam appliance. I'll also explain how the foam is produced and poured into the mold. Until then, keep at it, and good luck with your first life mask.

--BILL SCHWARZ
This ape is NOT from the PLANET OF APES, but it's a pretty close facsimile -- it was created by CINEMAGIC'S make-up editor, Bill Schwarz who, indeed, gathered much of his knowledge from the man who started the ape make-up craze: John Chambers. To find out how you can create similar masterpieces, see page 14 in this issue.