

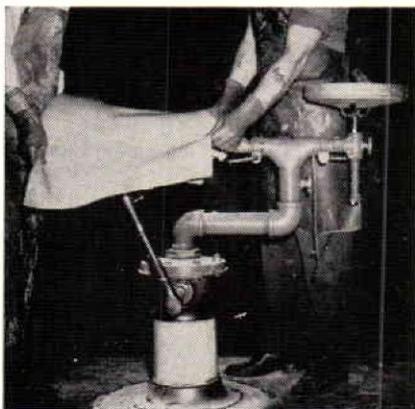
Laboratory and Shop Notes

A Column of Practical Ideas

Contributing Committees Alvin L. Muilenburg, *Chairman*;
G. E. Snell, C. O. Anderson, Erich Hanicke, Joseph Martino.

This is meant to be a practical column, devoted to methods and equipment used in the actual fabrication of appliances. Contributions are welcome.

SPECIAL CAST HOLDING DEVICE



Erich Hanicke of Kansas City describes a special cast holding device:

New materials and new techniques sometime require new methods of fabrication. The photograph shows a heavy stand which we use to hold plaster of paris casts. Originally it was designed to facilitate application of celluloid in the manufacture of celluloid corsets and also the molding of heavy leather for corsets and sockets. At that time we did not realize how much more valuable this stand was going to prove with the introduction of celastic molding fabric and especially the fibre glass and resin technique.

This method has enabled us to have much better control over our work and it also gives the necessary resistance to the force which must be exerted to obtain a good product. This is especially true in leather molding.

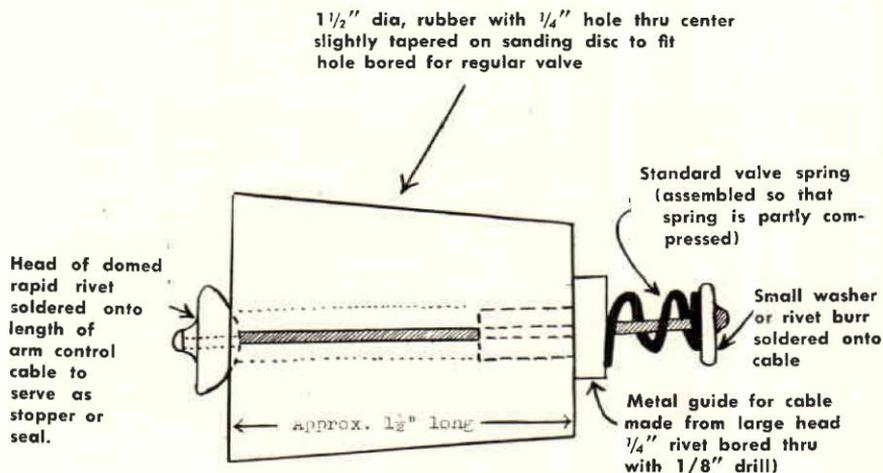
We used a barber chair as a base. The entire mechanism can be elevated or lowered to desired height. It has a heavy double outlet head with a clamping feature to tighten a machined ferrule. This ferrule holds 1 inch pipes that are put into the casts when the plaster is poured. The pipes are held secure in the ferrules with allen cup screws. A pipe tee mounted on a short end of pipe serves as a right angle clamp for holding tools, etc.

Incidentally, instead of making body casts solid with plaster, we use the rolling method and make the cast about 1" thick. Two short 1/2" pipes are plastered into the wall of the cast. Two couplings with C clamps are fitted onto a long 1" pipe, adjustable up and down. In this manner the pipe frame can be easily detached from the cast and used for the next cast.

From *Alvin Muilenburg of Houston, Texas*: See-8 resin is excellent for repairing cracks in wood sockets, knee blocks and feet. When mixed with

Sano-Cel (a fine white powder available from See-8 dealers) it can be used in any consistency. Sawdust and fibre glass can also be used when extra strength is needed.

Ed Snell of Little Rock (Director of Region VIII) has a labor-saving device:



In fitting suction sockets on the adjustable leg, we frequently find it necessary to re-set the valve in the duplicating process. To avoid this extra labor and also to save time in fitting, we have devised a temporary valve which can be inserted in the hole bored for the standard valve and used without waiting for glue or plastic to set. This device can be made in your own shop in just a few minutes using materials which you probably already have on hand, as per the attached sketch.

John D. Hinnant uses a unique type of roller pencil with scale built in. With this he is able to measure the inside of the circumference of even a small child's socket. John reports that it is a very handy item to take with you to clinics. The roller pencil attracted much attention when he displayed at the National Assembly. This 'Roller Rule' can be ordered from the Roller Rule Company, 1319 Gavitota Avenue, Long Beach 13, California.

Joseph H. Martino, President of the United Limb and Brace Co., Inc. and a member of the Journal Committee sends along five suggestions for your consideration:

1. Provide articulated platforms for the double above-knee amputee by installing an ankle joint with anterior and posterior bumpers. This permits the platforms to remain longer in contact with the floor, making for more stability.
2. Laminate special size forearms on beeswax forms instead of plaster. Easily contoured, easily melted out. Quicker production.
3. Coat interior finish of suction sockets with Ambroid Cement diluted 50% with Ambroid Solvent, sanded in between coats. Four or five coats provide hard gloss like finish. Do not permit patient to wear for 24 hours.
4. Use a Stanley Surform File for rasp work on willow legs.
5. Supplement Silesian suspension with an elastic iliac crest strap to hold bandage in place on lean, slim patients.