Laboratory and Shop Notes

A Column of Practical Ideas

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

Joseph H. Martino, the United Limb & Brace Co., Inc., of Boston, writes: "Protek-sorb, which is the silica gel crystals, works well in absorbing normal moisture in suction sockets. However, when there is excessive perspiration involved, the paper container dissolves and the package is no longer usable.

"In the shop, we are experimenting with \(^3\)/\(^4\)" wide band saw blades in the hopes that we can obtain straighter cuts, longer blade life and more efficient operation. Also, we have a bayonette type of jig saw which, when working with plastic laminate parts, works better than the Dremel coping saw we mentioned a few months ago. There is a small electric carving tool with molding heads that is excellent for cleaning the grooves and slots of the Otto Bock knees.

"We have been having a little difficulty finding the proper buckles for the plastic laminate sockets on the Canadian hip disarticulation type of prostheses. We are wondering what the other limb shops throughout the country are using and from where are they obtaining them."

SOMETHING NEW IN THE WELDING OF ALUMINUM

By J. H. BENNETT

Les Stovall, shop foreman at Waco Orthopedic Brace & Limb Co., added something new and put it to use while I was away attending the National Assembly session at Miami Beach. As a result we feel that in using aluminum welding in this shop we have eliminated the one big problem and major headache in aluminum bracing.

As every orthotist knows, often in the shaping of an aluminum leg brace, one of the upright bars will break. This means replacing it. Often a patient will break an aluminum upright side bar on a leg brace, and this will require the replacement of the complete upright assembly. This means disassembling the bands and leather work, reshaping the upright and realigning the brace. All this adds to the cost in time and materials. The patient has to foot the bill and sometimes when the bill is presented to him there are hard feelings and arguments about the price. But with this new aluminum welding, most of these problems and headaches are avoided. After the welding of the aluminum it is as strong as before being broken.

It used to be an hour's job to replace an upright on an aluminum thigh length brace before we began welding aluminum. Now it takes only fifteen to twenty minutes to do the job. And after it has been welded, sanded and polished, it is hard to tell where it has been repaired. This saves time, and money.

The cost of aluminum and aluminum flux is reasonable. We use Oxy and Acy mixture, and find it to be the best. We also have a set up of natural gas and oxygen, but this natural gas mixture doesn't have the pressure to do the job and make it effective. We are using pure aluminum rod (1/16'') and aluminum flux. If anyone would like to have more information on this, we'd be glad to hear from them and help in any way.