assembling them at some shipping centre so that all can be supplied to the user together. The dealer that can and will do this is a good man, especially for the smaller users of veneer, to tie to, because with his larger experience he can more readily locate just what the user needs in every case, and thus save the user both time and money, that amounts to a whole lot more than the dealer's profit.

On the subject of matching up and toning face stock there is more that can be said, too, even though it may seem to have already been pretty well covered. Sometimes it is matching that is needed, and sometimes toning. Maybe that is not just the way you would state it, but it will answer. It is like this: If you have a job in quartered oak, and it is to be heavily stained so that the original color is all practically wiped out or changed over, the main thing to aim at in jointing two pieces together is to get pieces in which the figure matches, or comes so near it that the two will go together harmoniously. Get pieces in which the tracings of the splash line have the same general contour, run in the same direction as put together, etc., and even though one piece may be white and the other red in color, presenting something of a contrast, the color will be evened in the staining till this contrast disappears, while the figure will show up nicely. On the other hand, if the work is to be finished natural, or practically so, you must frequently watch out for both figure and color. In other words, the important point is to get a harmonious tone in color. That's why sometimes it is more of a matching job, while at other times it takes on more of the nature of a toning job, because there is no chance to tone up in staining. This same logic applies to all face woods having figure and color that is used natural, and it is a good point to keep in mind.

SELECTION OF GLUE.

In selecting glue preference should generally be given to the hide glues, the ones that will spread best. The tendency of bone glue is to be so readily absorbed into the wood that either it will not spread enough or the wood will soak up so much of it before it sets that there won't be enough left on the surface to make a good joint. There are times when glue tactics must be changed, sometimes reversed. For instance, suppose you are using a close-grained wood that is, maybe, glazed a little on the surface, so that the glue does not stick to it readily. Then it is a good idea to have a penetrating glue, one that has a tendency to go into the wood, rather than to spread. On the other hand, if it is an open, sponge-like wood, you need a glue that will string out, or else you will have to size your work with a thin coat to stop up some of the pores. It is because of these and other things that people have to keep experimenting with glue—to find out what combination is best for any given purpose.

As for the cost of doing the work, that depends on so many things that it is pretty hard to give even what might be regarded as a safe starting point. The figures given above are for flat work in ordinarily well-equipped panel plants. Shaped work of all kinds costs more, though some plants may keep some shaped work within the figures named. On the other hand, it frequently costs planing mills and others doing special jobs of just a few pieces of each kind considerably more to do flat work. It is a matter of both equipment and quantity—the more quantity and the better the equipment, the cheaper it should be done. The chances are that for the work alone the cost in the average planing mill more frequently goes above than below even twice the figure named above, or $10 per thousand feet. In fact, it is not possible to give average figures on this class of work, because nearly every job is different, frequently calling for special equipment and preparations, which have to be considered carefully in each individual case.

Probably the weakest point in the average glue-room practice is in the habit of cooking glue too much. This has frequently been pointed out—that glue should not be cooked, but merely warmed till it will flow easily, and yet many keep at it, keep cooking it too much, and wondering at times what is the matter. One reason for this is the haste to get the glue ready for work; a little more rapid cooking is risked and a little more heat applied. One good remedy for this is to have a soaking tank in which to dissolve the glue before it goes into the heater, and then just a little warming up puts it in good shape—and you are safe from overheated glue. There is on this point, as on most others, a difference of opinion, but since it promises to prevent overheating it is worth trying. A tank for soaking does not cost much, and can be made by your local tinner.

BENDING WOOD.

Wood bending is based on and consists of compression. Wood does not safely stretch a particle; if it does, it breaks. So when wood is bent, the difference in the length of the wood on the inside and outside of the bend must be made up for by compression. It is important to remember this fact for several reasons. One is to protect the wood on the outside of the curve from any tendency to stretch, which may break it; the other is to not only select the right kind of wood, but also to prepare it and get it in such condition that it will compress most readily. It is because a knot will not compress readily that it makes a serious defect in wood intended for bending, and because a knot cannot be compressed readily if it is present in that part of the wood which is to be bent, it is better to have it on the outside than on the inside, though of course it is best not to have it there at all.

Any wood may be bent to a certain extent, but of course some woods bend more readily than others, and usually the more tensile strength the wood has the better it is, provided this factor is not interfered with by the unusual resistance to compression. An example illustrating this point is hickory, which has great tensile strength and bends well, too, but not nearly as easily as it would if it were not so hard and difficult to compress. Elm, which has not the same tensile strength as hickory, but is softer and more easily compressed, will therefore bend more readily than hickory, and where the strength and hardness are sufficient to answer the purpose, it makes one of the best woods known for bending purposes. White pine, which is a wood easily compressed, seems to be shy in tensile strength, and though it can be and is bent, it is not considered for most purposes a good wood to use.

What might be termed the leading woods for bent work are hickory, oak, elm, ash, and there are lots of other woods that are bent and are made to bend successfully, among them being gum, mulberry, yellow pine, willow, birch, and a number of others, but the ones named might be considered the leaders in the bent-wood industry, and the others enter more as incidentals.

There are some woods that can be bent very readily by simply soaking them in water at ordinary temperature, and many times in the bending of light articles this is all the preparation resorted to. This would indicate that water or