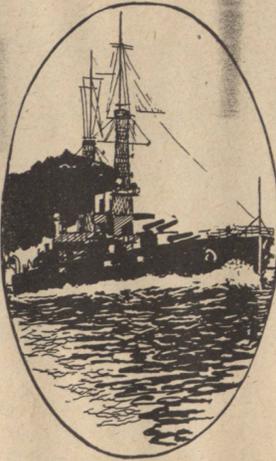
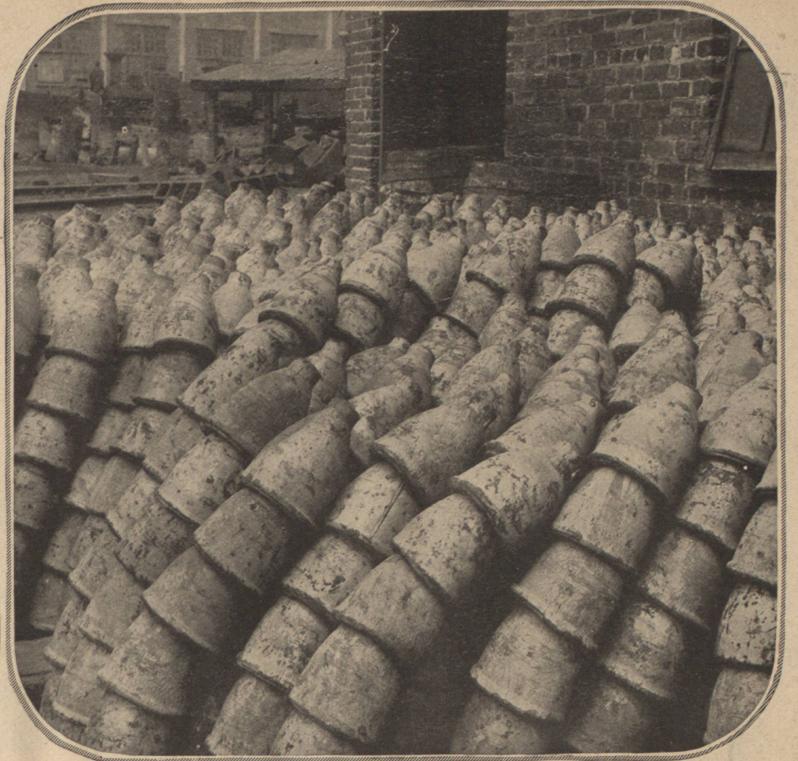


A new kind of sea-shell— for the American Navy

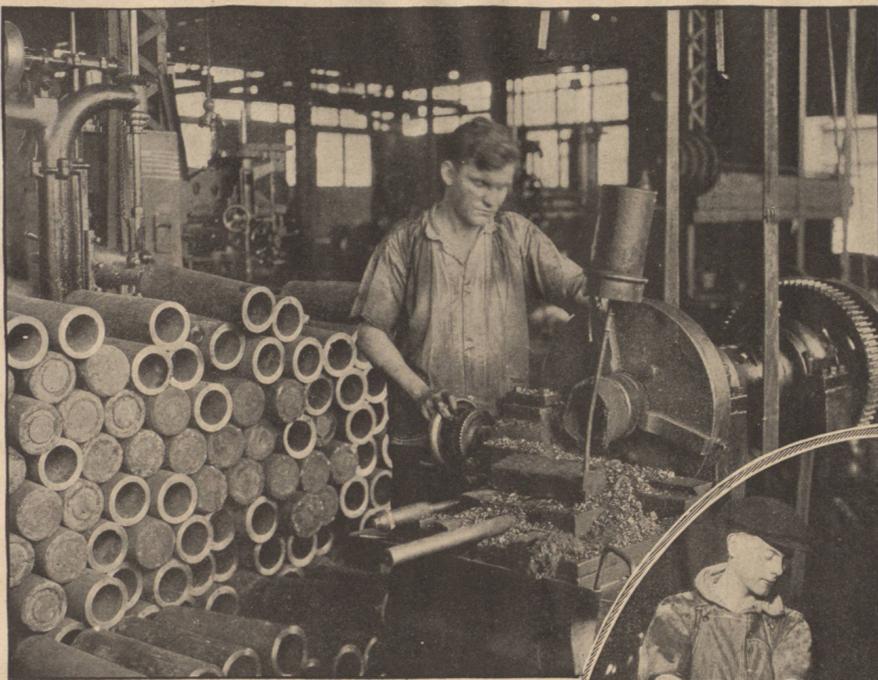
Photos © by Press Illustrating Service



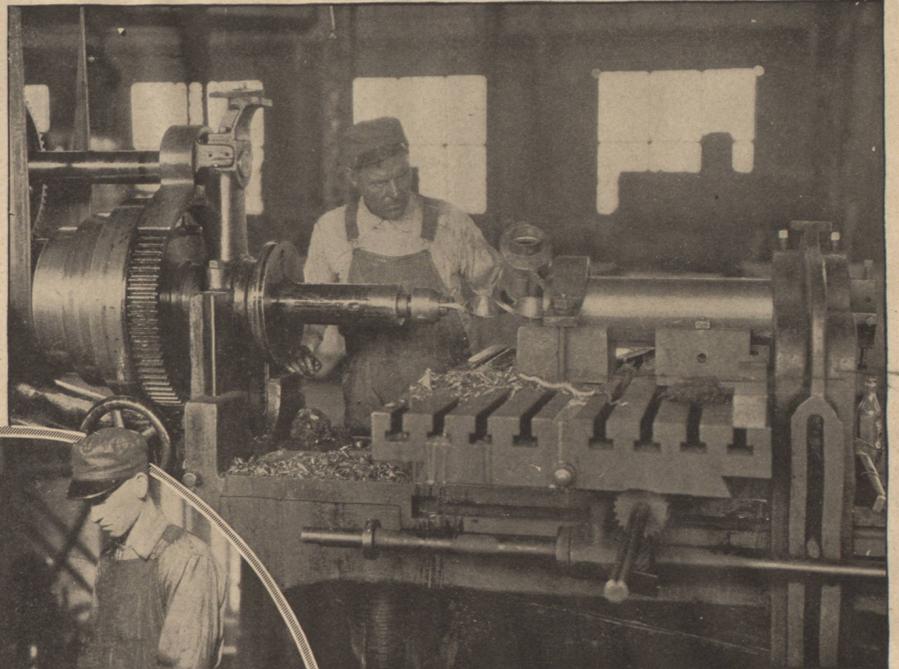
Here are the shell cases as they first come to the munitions factory from the foundries. They appear like so many lengths of metal pipe, with rough-cut ends, averaging perhaps twenty-five inches long.



At the same time that the lengths are supplied quantities of steel nose-pieces are stacked in the yard, awaiting finishing. The nose-piece is the point of the shell, and made so that it can be screwed to the body of the shell, after the latter has been filled.



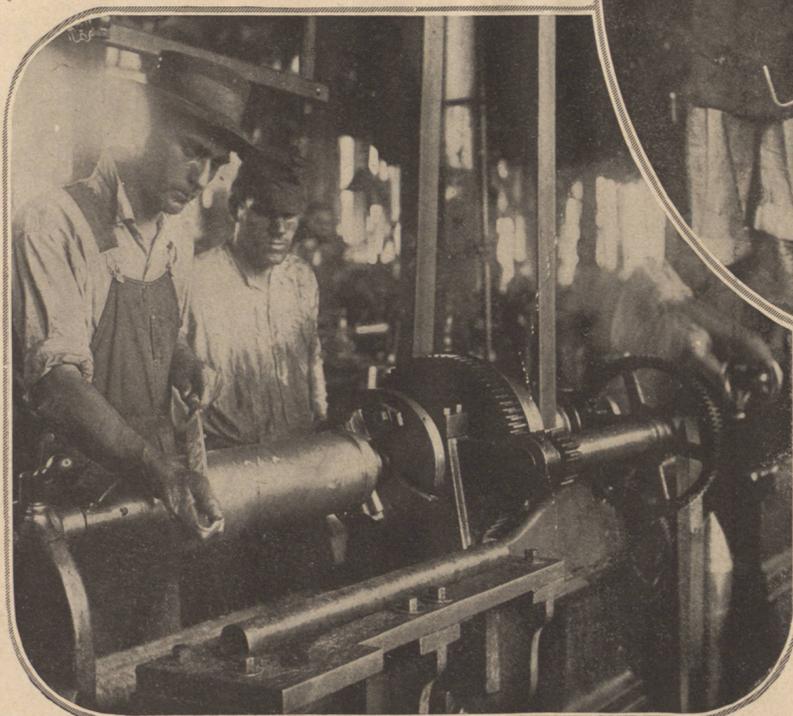
The shaft of the shell is sent to the shop, where the forged "pipe" is carefully measured and cut to the requisite length. Cut shells are shown in the left of the picture.



As the navy specifications require the shells to be of a certain thickness, the shafts have to be bored out to reduce the metal wall to the measure. This is done with an auger, in precisely the same way as one would hollow out a broomstick.



After the nose-pieces have been trimmed down and smoothed they are screwed to the shafts while the latter are held in this complex vise. The shell is now finished on the inside for no provisions are made for filling, which is done afterward at the powder factory.



The shell now goes to the finishing shops, where it is first smoothed off on machines built for the purpose, then sent on to be filed down. As it rapidly revolves on the machine shaft the shell is filed off, nose-piece and body, by hand.



The shell is now ready for the finishing touch which gives it a neat appearance for its social debut in marine quarters, namely a coat of yellow enamel to prevent rust in transit. During this operation it is hung by holes drilled into the nose-piece, and these same holes receive the wrench when the case is filled. It is then dispatched to the powder works for loading.