

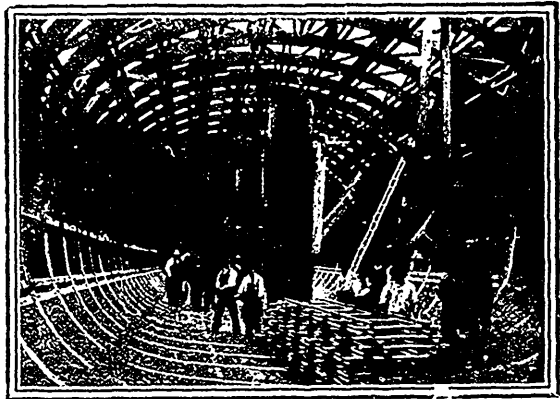
*Science Notes.***A PORTABLE TUNNEL.**

A novel method used in constructing the new tunnel under the Seine for carrying the lines of the Metropolitan Railway of Paris, is noted in Popular Mechanics. Says this paper:

"The tunnel is built in sections—huge caissons of steel—which are floated to position and sunk.

"The walls of each section are filled with rubble when it is sunk and the flanges on its bottom hold it away from the river bed and form a space from which the water is expelled. This space is used as a working chamber, where the work of excavation is carried on with only a moderate degree of compressed air. Connection tubes in the tunnel sections, provided with ladders, are used for passing in and out of the working chamber. As the bed of the river is excavated, the section sinks lower and lower until it is at last beneath the surface. All hollow spaces are filled in with rubble as the work proceeds and the tunnel is finally covered over.

"Conditions in the working chamber are of the best. Electric lights are used and telephones afford communication facilities. For dealing with the rock strata a special powder which gives off little fumes is used, and excavated material is rapidly removed. This material passes up the connecting tubes in steel buckets which, on reaching the top, are tilted to precipitate the material into barges on the surface of the Seine."



WORKING IN A CAISSON UNDER THE RIVER SEINE.

**THE NEW DISCOVERIES OF SCIENCE.**

Professor Lancaster, in his presidential address before the British Association for the Advancement of Science, said it was a great privilege to live in an epoch like the present, which would stand out for ever in human history as the period in which new chemical elements of astounding properties were revealed with extraordinary rapidity. Yet we fear that there are a great many people now living who do not appreciate the privilege, and, indeed, do not take the trouble even to keep informed on the discoveries which in the last five years have made for science a new heaven and a new earth. Not long ago astronomers were engaged in calculating the rate of cooling of the earth. Now it is a question whether

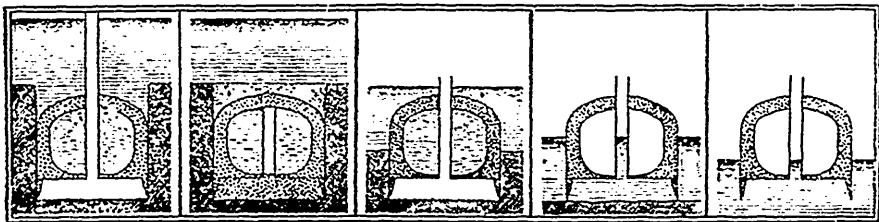


DIAGRAM SHOWING SECTIONS HOW THE TUNNEL WAS SUNK.