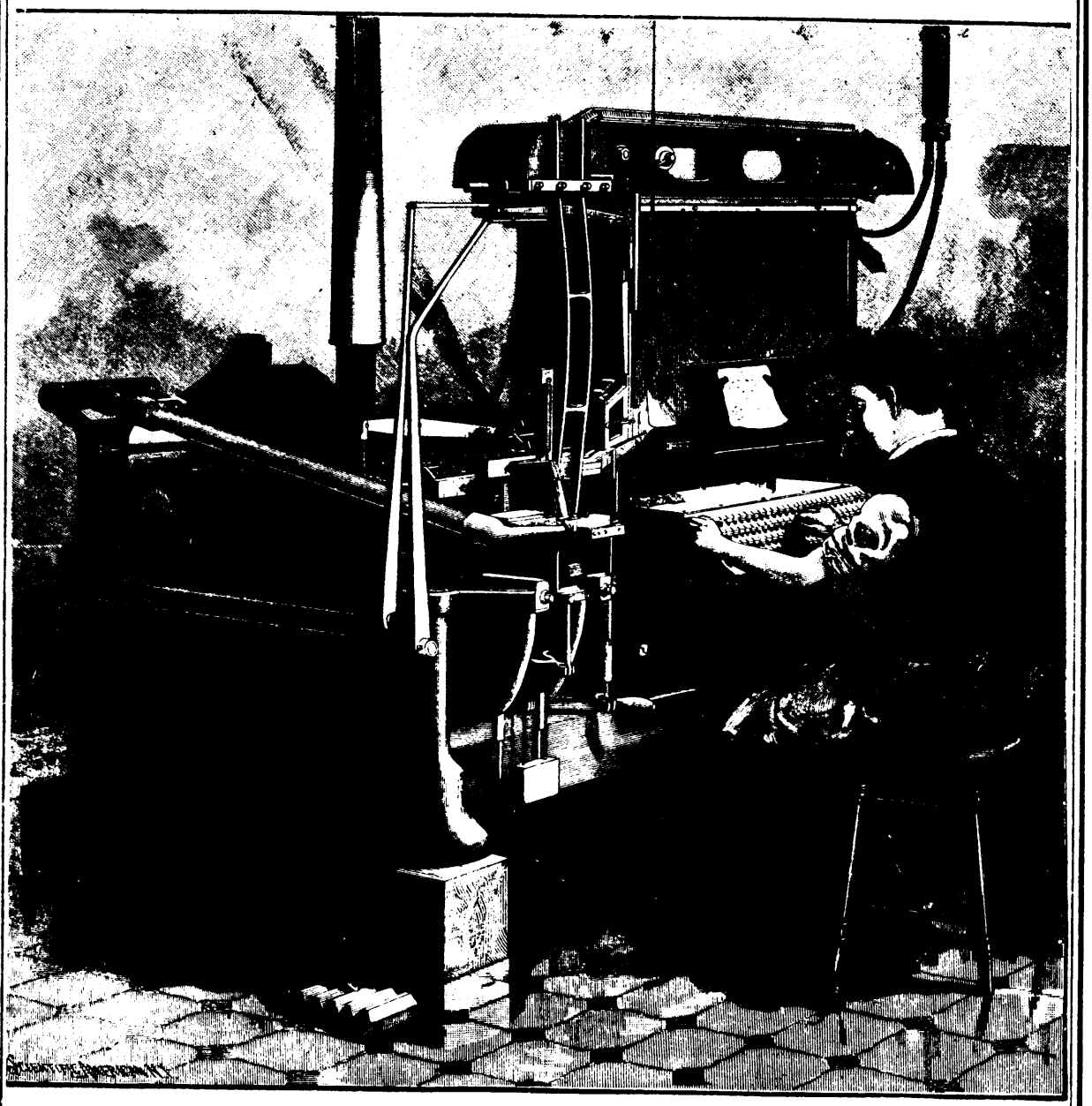

SETTING TYPE BY MACHINERY, AS CONDUCTED AT THE NEW YORK "TRIBUNE" OFFICE.

thereto, C the reservoir of melted metal in its gas-heated chamber, D a plunger acting as a force pump to force the metal into the mould, and E an ejector bar which has forced out the type bar, F. For the purpose of forcing the line of matrices tightly against the mould, their characters registering with the mould proper, an outside clamping head is employed to bear against the outer edge of the line, while supplemental clamps or jaws assist to hold the line firmly and in exact adjustment. To avoid overheating of the mould when rapidly operated, it is made with transverse openings adapted for communication with the blast nozzle, although no difficulty is ordinarily experienced on this account.

There are, as is well known, a great variety of type metals, according to the sizes of type and its uses, ordinary type for newspaper work being mainly composed of 6 parts lead and 2 of antimony. The addition of a little bismuth, however, carries down the melting point, and also produces a softer metal, as more commonly used for stereotypes. Such an alloy, composed of 9 parts lead, 2 of antimony, and 2 of bismuth, readily melts at about or a little over 300° F. The thin type bar made by the machine, therefore, readily cools sufficiently for ejection during the revolution of the mould disk, the type bars being thence carried to a galley attached to the machine to the left of the operator, where the bars are assembled in the order of their production in the form of a column ready for use.

Not only is all this work done automatically, but the matrices, after the type bar has been formed, are automatically withdrawn from their position against the mould disk and