

No. 708,416.

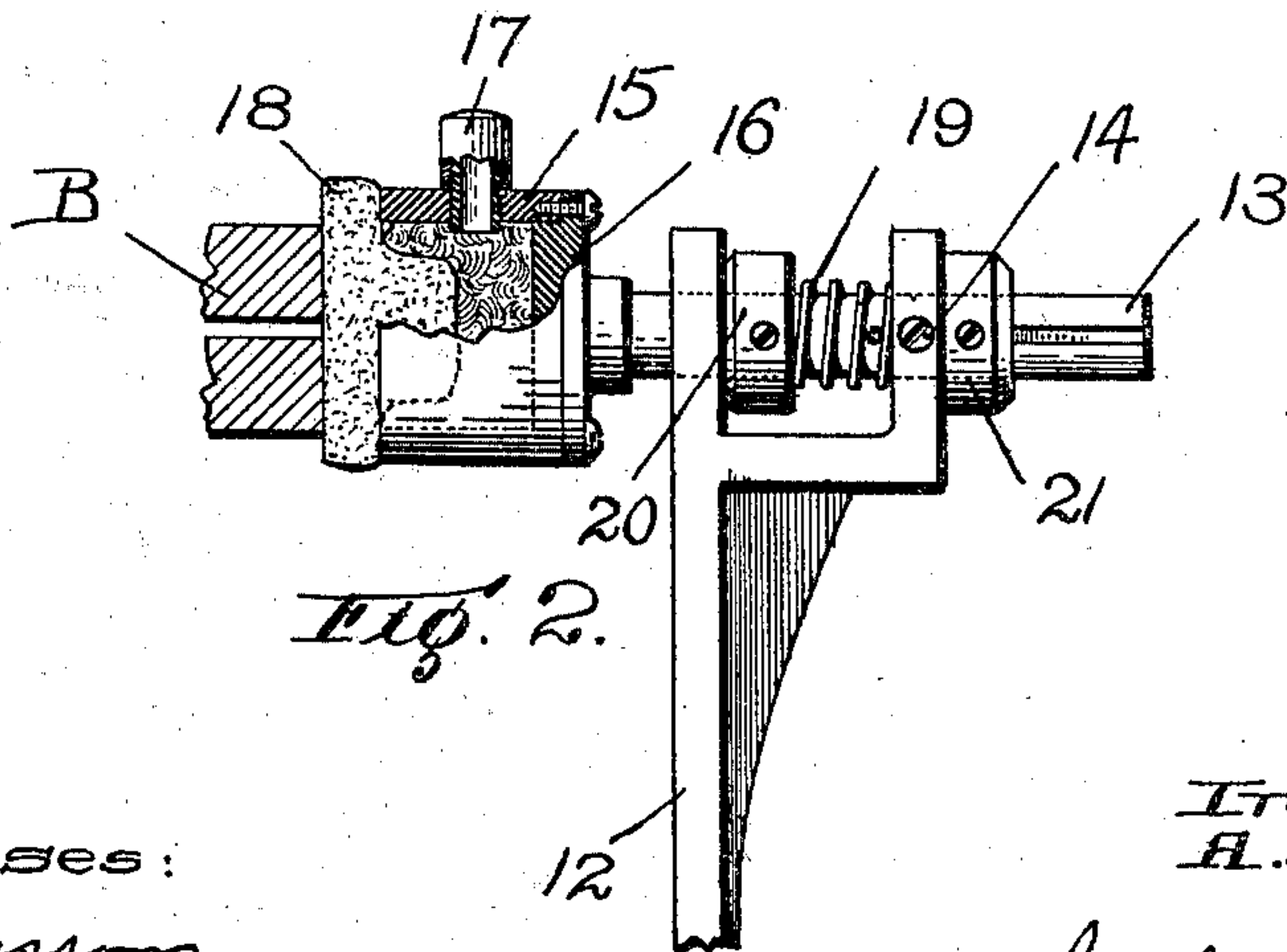
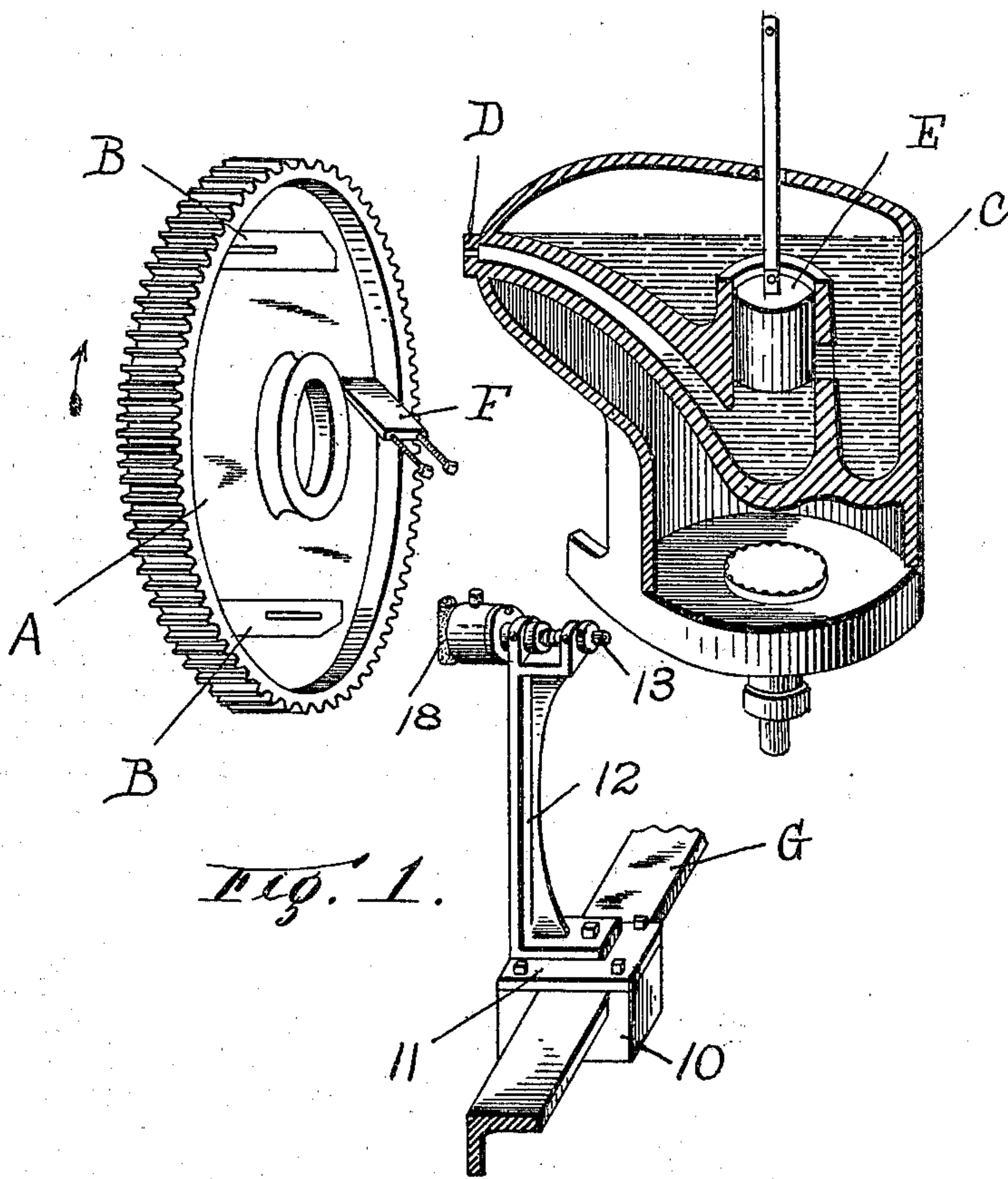
Patented Sept. 2, 1902.

A. D. SMITH.

ATTACHMENT FOR LINOTYPE MACHINES.

(Application filed Jan. 21, 1902.)

(No Model.)



Witnesses:

b. F. Wesson.
M. E. Regan.

Inventor:
A.D. Smith.

By
Southgate & Southgate
Attorneys.

UNITED STATES PATENT OFFICE.

ASA D. SMITH, OF WORCESTER, MASSACHUSETTS.

ATTACHMENT FOR LINOTYPE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 708,416, dated September 2, 1902.

Application filed January 21, 1902. Serial No. 90,670. (No model.)

To all whom it may concern:

Be it known that I, ASA D. SMITH, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Attachment for Linotype-Machines, of which the following is a specification.

This invention relates to an attachment which has been especially designed for use on linotype-machines, although the principle of this invention may be applied to type-casting machines of different construction from the ordinary linotype.

The especial object of this invention is to provide means for preventing the type-metal from adhering or sticking to the rear faces of the molds.

To this end this invention consists of the attachment for linotype-machines and of the combinations of parts, as hereinafter described, and more particularly pointed out in the claims at the end of this specification.

In the accompanying drawings, Figure 1 is a perspective view of sufficient parts of a linotype-machine to illustrate the application of my invention thereto, and Fig. 2 is an enlarged fragmentary view of an attachment for linotype-machines constructed according to my invention.

One of the most difficult problems in the use of an ordinary linotype-machine is to secure perfect joints between the rear faces of the molds and the spout of the melting-pot. In practice unless perfect working joints are maintained between the rear faces of the molds and the spouts of the melting-pot thin films of metal will be cast upon the rear faces of the molds, and if successive layers of metal are allowed to accumulate on the rear faces of the molds the films or wedges of type-metal are liable to wedge themselves between the rear faces of the mold and the trimming-knife, so as to either force back the trimming-knife or spring the web of the rotating gear which forms the mold-cap. If this is allowed to occur, the linotypes produced will be more than type-high, and hence will be an undesirable product. In addition to this, if type-metal is allowed to accumulate on the rear faces of the molds or is allowed to accumulate upon the end of the spout of the melting-pot it frequently happens that a proper

"lock-up" is not secured between the spout of the melting-pot and the rear face of the mold, so that when the metal is forced from the spout of the mold it produces "back squirts" or the escape of the type-metal from its proper channel. The type-metal can be prevented from accumulating upon the nose of the spout of the melting-pot by maintaining the proper temperatures; but, so far as I am informed, no efficient means have heretofore been provided for preventing the accumulation of type-metal upon the rear faces of the molds. In practice I have discovered that if the rear faces of the molds are slightly oiled or greased the type-metal has far less tendency to adhere thereto than if the rear faces of the type-molds are permitted to become dry or dirty.

The especial object of my present invention, is, therefore, to provide an attachment for linotype-machines which will serve both to clean or wipe the rear faces of the molds and at the same time apply a thin film of oil to the rear faces of such type-molds.

To these ends my invention consists, essentially, of an attachment for linotype-machines which is adapted to be secured in position to clean and oil the rear faces of the molds.

Referring to the accompanying drawings for a detail description of my invention, A designates the rotatable gear which forms the mold-carrier. Secured in the mold-carrier A are the molds B. I have herein illustrated the ordinary solid molds, although it is to be understood that my invention is equally applicable for use in connection with the expansible or adjustable molds. Coöperating with the mold-carrier A is the melting-pot C, having a spout D, through which the molten metal is forced by the plunger E. A trimming-knife F is secured in position to trim off the back faces of the linotypes which are cast in the molds B. These parts may be of the ordinary or preferred construction and need not be herein shown or described at length.

An attachment constructed according to my invention is especially adapted to be clamped or secured in position on the cross-bar G of the frame of the machine.

My attachment, as herein illustrated, com-

prises a yoke or U-shaped piece 10, which may be clamped in position by a cover-piece 11. Extending up from the piece 11 is a bracket 12, and longitudinally movable in the bracket 12 is the spring press plunger or shaft 13. As illustrated most clearly in Fig. 2, the shaft 13 is held from turning by a screw 14, and is provided at its forward end with an oil-reservoir, consisting of the cylindrical shell 15, fastened by screws to a disk 16. The oil-reservoir is provided with a filling-cap 17. The body of the oil-reservoir is filled with any desired absorbent material, and secured in a groove at the front of the oil-reservoir is a folded piece of wicking, felt, or other absorbent material 18. The shaft or plunger 13 is normally forced forward by a spring 19, which bears upon a collar 20, the forward motion of the shaft being limited by a collar 21.

In Fig. 1 for the sake of clearness I have illustrated the parts as slightly separated; but it is to be understood that in practice my attachment is secured in position so that the wicking or felt 18 engages the rear faces of the molds B as the molds are moved by the rotating carrier, as illustrated in Fig. 2.

In the operation of an attachment for linotype-machines constructed according to my invention after a linotype has been cast in a mold the carrier A is rotated or turned so that the knife F first acts to trim the rear end of the linotype, the continued rotation of the carrier A carrying the mold past my attachment, so that the rear face of the mold will be cleaned or wiped off and a thin film of oil applied thereto, which will prevent the type-metal from adhering thereto or collecting thereon during the succeeding casting operation.

I am aware that numerous changes may be made by skilled mechanics in practicing my invention without departing from the scope thereof as expressed in the claims. I do not wish, therefore, to be limited to the construction I have herein shown and described; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. In a linotype-machine, the combination of the rotatable mold-carrier, the trimming-knife, and an attachment adapted to be secured in position to clean and oil the rear face of a mold after the same has passed the trimming-knife.

2. As an article of manufacture, an attachment for linotype-machines, comprising a spring press-plunger carrying an oil-reservoir having projecting wicking or other fibrous material, and means for securing the plunger in place to clean and oil the rear faces of the mold.

3. In an attachment of the class described, the combination of a bracket or support, means for clamping said bracket or support upon the cross-bar or frame of a linotype-machine, a spring press-plunger mounted in said bracket, an oil-reservoir carried by the plunger, said oil-reservoir having projecting wicking or fibrous material, and a stop-collar for limiting the motion of the spring press-plunger, the said attachment being adapted to clean and oil the rear faces of the molds.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ASA D. SMITH.

Witnesses:

LOUIS W. SOUTHGATE,
PHILIP W. SOUTHGATE.