

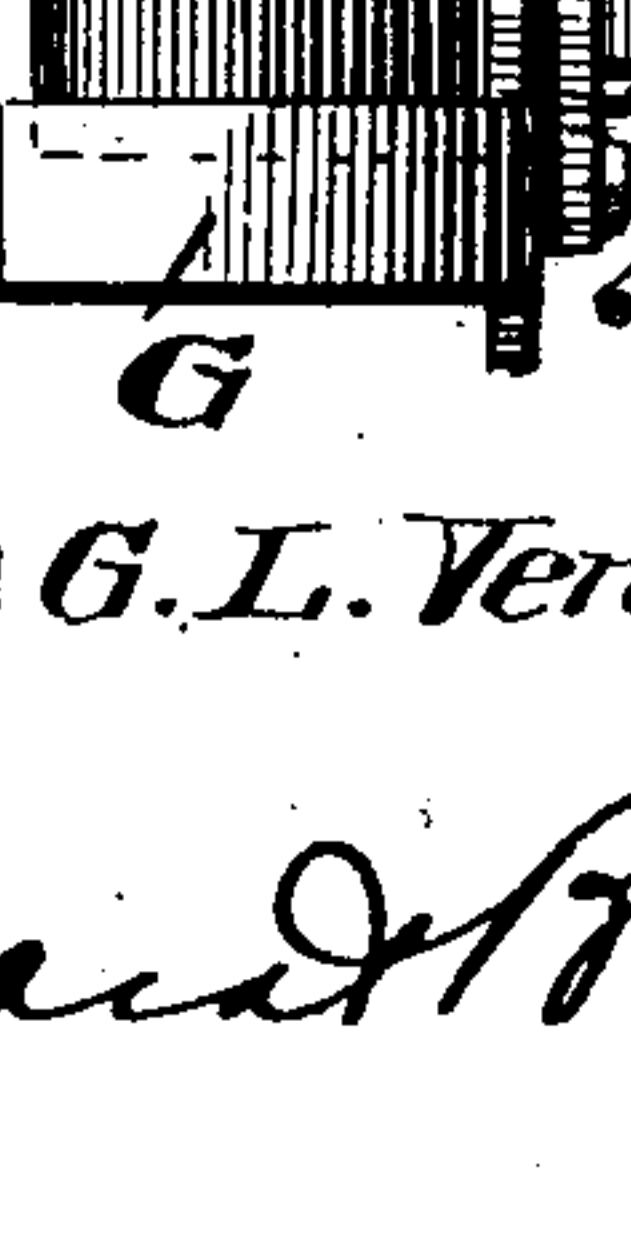
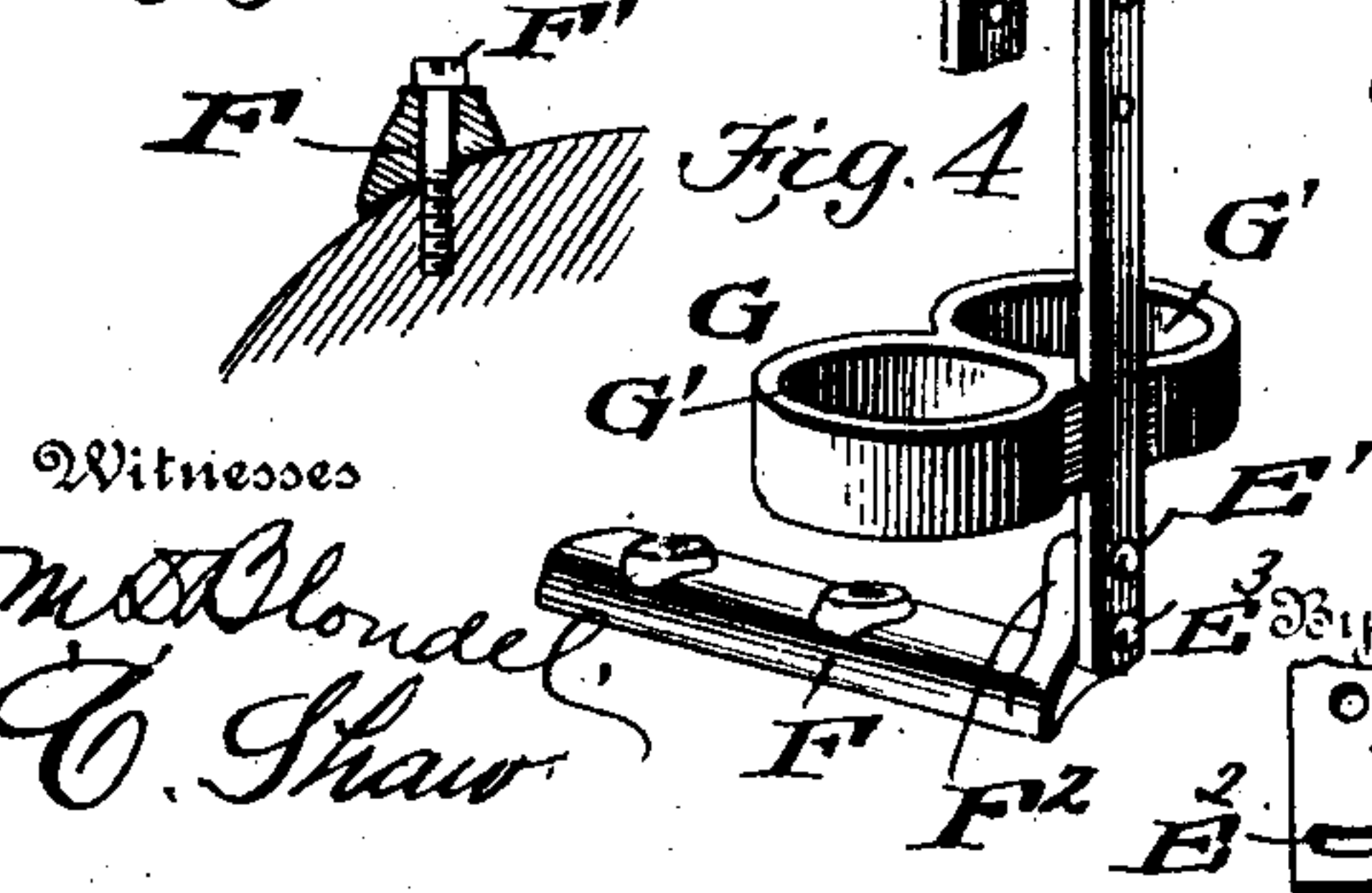
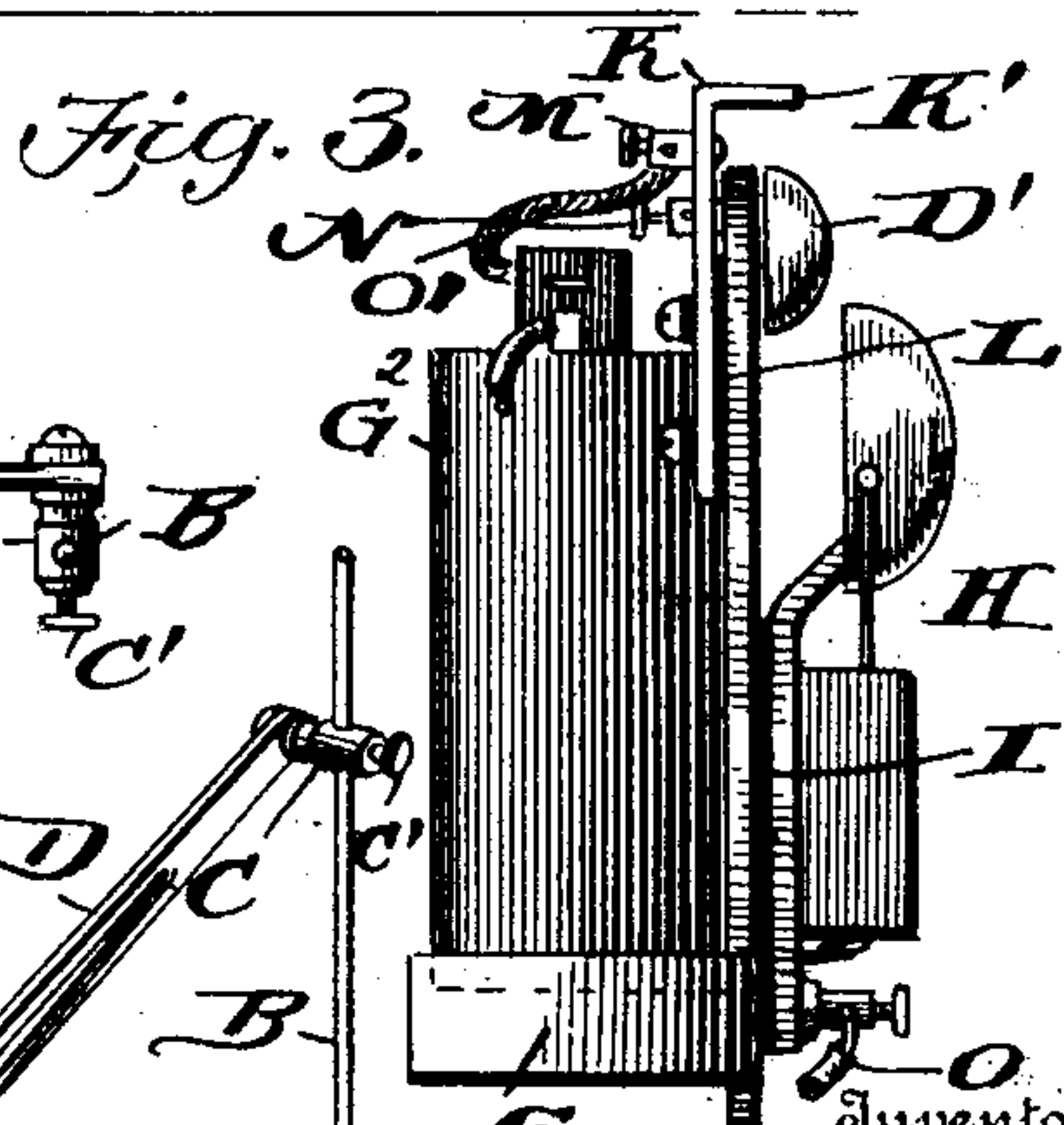
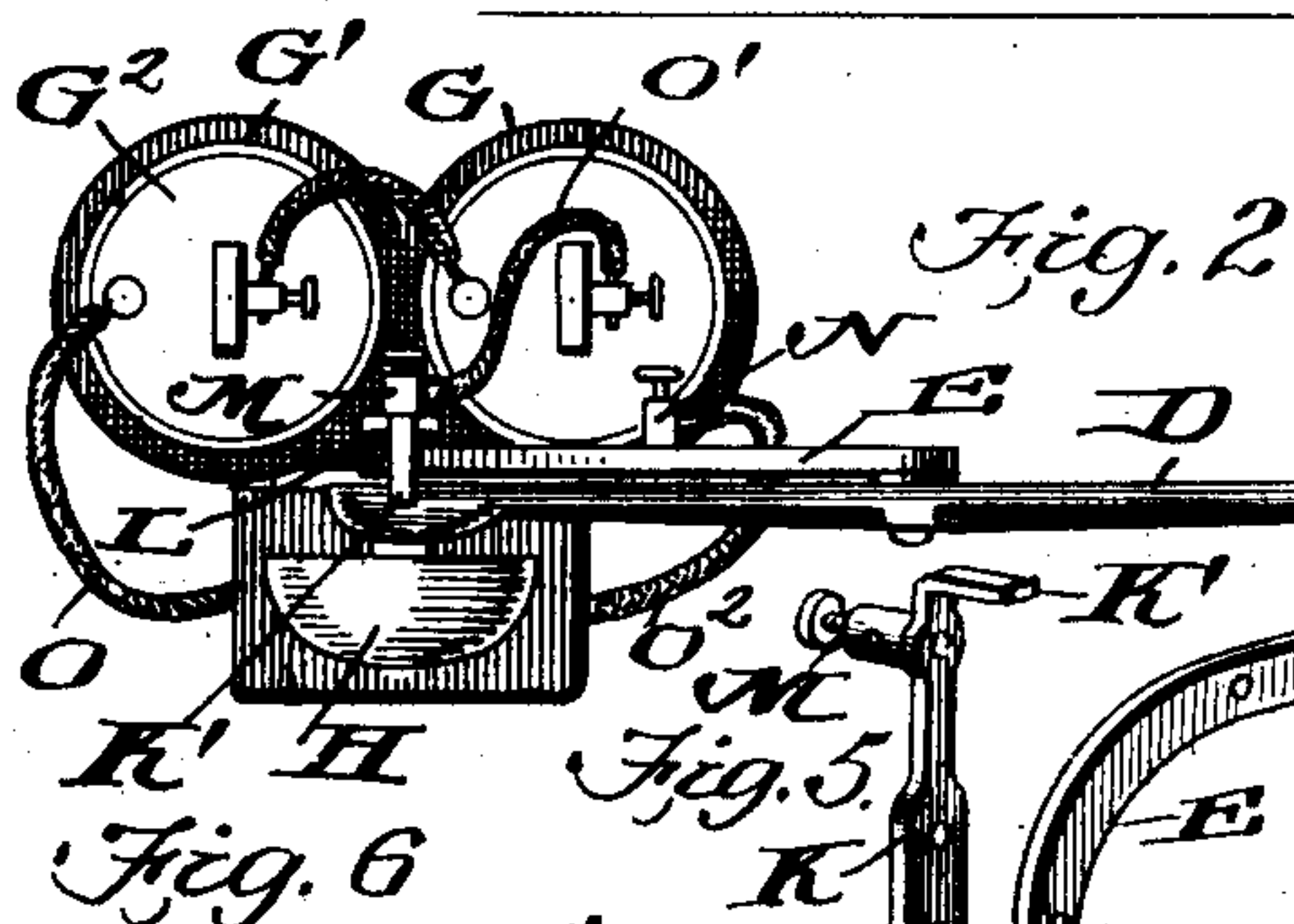
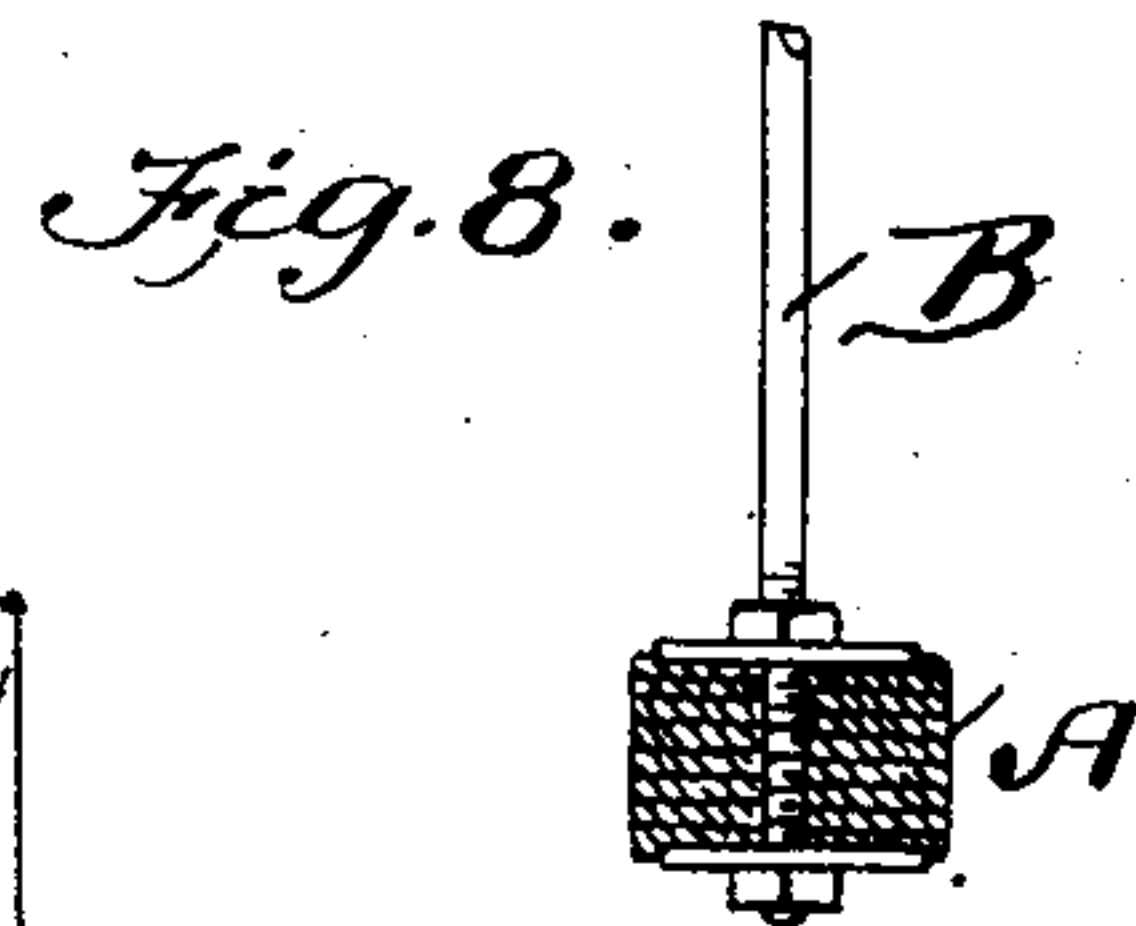
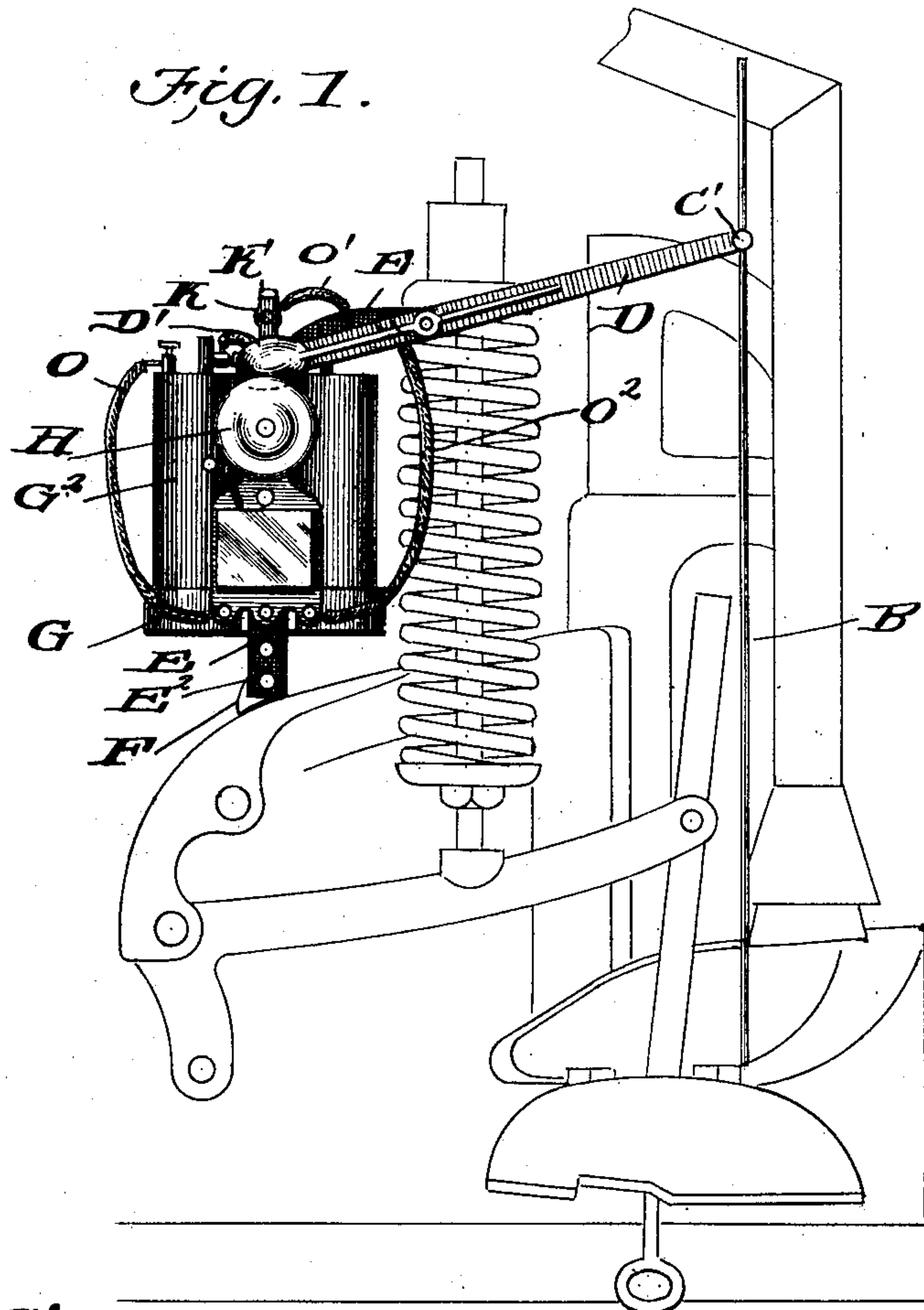
No. 754,030.

PATENTED MAR. 8, 1904.

G. L. VENABLE.
ALARM ATTACHMENT FOR LINOTYPE MACHINES.

APPLICATION FILED APR. 11, 1903.

NO MODEL.



Witnesses

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GEORGE LEO VENABLE, OF NEW BRUNSWICK, NEW JERSEY.

ALARM ATTACHMENT FOR LINOTYPE-MACHINES.

SPECIFICATION forming part of Letters Patent No. 754,030, dated March 8, 1904.

Application filed April 11, 1903. Serial No. 152,229. (No model.)

To all whom it may concern:

Be it known that I, GEORGE LEO VENABLE, a citizen of the United States, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented a new and useful Alarm Attachment for Linotype-Machines, of which the following is a specification.

This invention is an alarm to be used in connection with a linotype-machine for the purpose of indicating to the operator when the molten metal within the pot reaches a certain limit, thereby notifying the operator that the supply of metal is getting low, so that the said operator can place another pig of metal in the pot and continue the operation of the machine. Heretofore no alarm mechanism has been employed, and it has frequently happened that the supply of metal has gotten so low that it was necessary to insert two pigs of metal into the pot, and this necessarily cooled the metal to such an extent as to render the operation of the machine in a measure defective.

One object of the invention is to avoid these objections; and another object is to make the device adjustable, so that the operator can have the alarm become operative at any desired point.

With these objects in view the invention consists, essentially, in providing an incombustible non-metallic float, which is arranged within the pot of molten metal and floats upon the surface of said metal, said float being suspended from a lever pivotally mounted upon a support connected to the frame of the machine, said support carrying an electromagnetic bell, batteries, and connections, and also a contact-arm, which is also connected with the batteries and bell, the lever having a contacting portion which engages the contact-arm, closes the circuit, and sounds the bell whenever the float falls to a certain predetermined point.

The invention consists also in certain details of construction hereinafter fully described, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a view showing the practical application of my invention. Fig. 2 is a top plan view of the same. Fig. 3 is an end

view, the connections being broken away at certain points to more clearly illustrate the other features of the invention. Fig. 4 is a detail perspective view of the base, the upright connected thereto, and the battery-support carried by the upright. Fig. 5 is a detail perspective view of the contact-arm. Fig. 6 is a detail sectional view of the base, showing the manner of connecting the same to the machine; and Fig. 7 is a detail perspective view of the lever, float, and rod connecting the lever and float.

In carrying out my invention I employ an incombustible non-metallic float A, which is preferably constructed of asbestos and is adjustably secured, as upon the lower end of a rod B, said rod passing through an arm C, pivotally connected to the forward end of a lever D. The arm projects laterally from the said lever, and the rod is secured in the arm by means of a set-screw C', which passes through the end of the same and binds against the rod. The lever D is pivoted to the forward end of an angular upright E, the lower end of said upright being adjustably connected to a base F, said base being secured to the top of the pot-pump bracket by means of screws F', said base having a bracket-arm F² at one end thereof, to which the lower end of the upright E is connected, said connection being effected by means of a bolt E', which passes through the upright and bracket-arm, and the lower end of the upright has a curved slot E² produced therein and through which a bolt E³ passes for the purpose of locking the upright in its proper adjusted position, the slot permitting a limited adjustment of the said upright, so that the said upright can be properly adjusted with reference to the pot-pump bracket, as this bracket varies somewhat in different machines, and the upright E is made adjustable, so as to accommodate all kinds of machines.

A battery-support G is connected to the upright E adjacent to the lower end, said support consisting of a plurality of cupped-shaped receptacles G', in which the cells G² of the battery rest, there being as many such receptacles as there are cells employed in the battery, and ordinarily two cells are sufficient, consequently two cups. An electromagnetic

bell H is arranged upon the opposite side of the upright adjacent to the lower end, a strip of insulating material I being inserted between the bell-frame and upright. A contact-arm K is connected to the upright E at the bend of the same, a strip of insulating material L being inserted between the said upright and contact-arm. This contact-arm has an angular portion K' at the upper end, which projects into the path of travel to the rear end of the lever D, said rear end being enlarged, as shown at D', to provide a counter-balance for the float. The contact-arm K has a binding-post M, and the upright E has a binding-post N. The cells of the battery are connected in series, and a conductor-wire O extends from one terminal of the battery to the bell, while the other terminal of the battery is connected to the binding-post M by means of a conductor-wire O', and a conductor-wire O² connects the binding-post N with the bell, so that when the float descends, carrying with it the forward end of the lever, the rear end of the lever is raised, bringing the portion D' into contact with the angular portion K' of the contact-arm K, thereby closing the circuit and ringing the bell, and the bell will continue to ring until more metal has been supplied to the pot, thereby raising the lever, and consequently the float. By having the rod which carries the float pivotally connected to the end of the lever the float and rod can be readily swung to one side whenever it is desired to remove same for any reason, and by having the rod adjustable the float can be fixed so as to sound the alarm at any desired point, thereby enabling the operator to adjust the alarm with reference to the character of work being done by the machine. The support which carries the lever being adjustable, the device can be applied to any and all machines now in use. The float being of asbestos will not be affected by the molten metal, whereas a metal float would gradually accumulate metal thereon, and consequently become too weighty.

It will thus be seen that I provide an exceedingly cheap, simple, and efficient construction of alarm capable of use in connection with all kinds of linotype-machines and one which will effectively perform the purpose for which it is desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an alarm for linotype-machines, a base

provided with means for securing it in position on the machine, an upright adjustably secured to the base at one end, a balanced lever secured to the other end of the upright, a float adjustably secured to the outer end of said lever, and a signaling apparatus in position to be operated by the inner end of the lever.

2. In an alarm for linotype-machines, a base provided with means for securing it in position on the machine, an angular upright, the lower end of which is perforated and slotted and adjustably secured to the base, a lever pivotally secured to the other end of said upright, a float adjustably secured to the outer end of said lever, and a signaling apparatus in position to be operated by the inner end of said lever.

3. In an alarm for linotype-machines, a base provided with means for securing it in position on the machine, an upright adjustably secured to the base at one end and having a support near said end, a lever pivotally secured to the other end of said upright, a float adjustably secured to the outer end of said lever, a battery on the support provided with a circuit, a signal in said circuit and means for engaging with the inner end of said lever and closing the circuit.

4. In an alarm for linotype-machines, a base provided with means for securing it in position on the machine, an upright adjustably secured to the base at one end, a contact insulatively mounted on the upright, a lever mounted on the other end of said upright, the inner end of said lever being adapted to engage with said contact, a float adjustably secured to said lever, a signal, and a battery provided with a circuit which includes said signal and contact.

5. In an alarm for linotype-machines, a base provided with means for securing it in position on the machine, an upright adjustably secured to the base at one end, a lever pivotally secured to the other end of the said upright, a laterally-projecting arm at the outer end of said lever, a rod through said arm, the lower end of which is provided with a float, a set-screw for adjustably securing the rod in the arm, and a signaling apparatus in position to be operated by the inner end of said lever.

GEORGE LEO VENABLE.

Witnesses:

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