

No. 884,022.

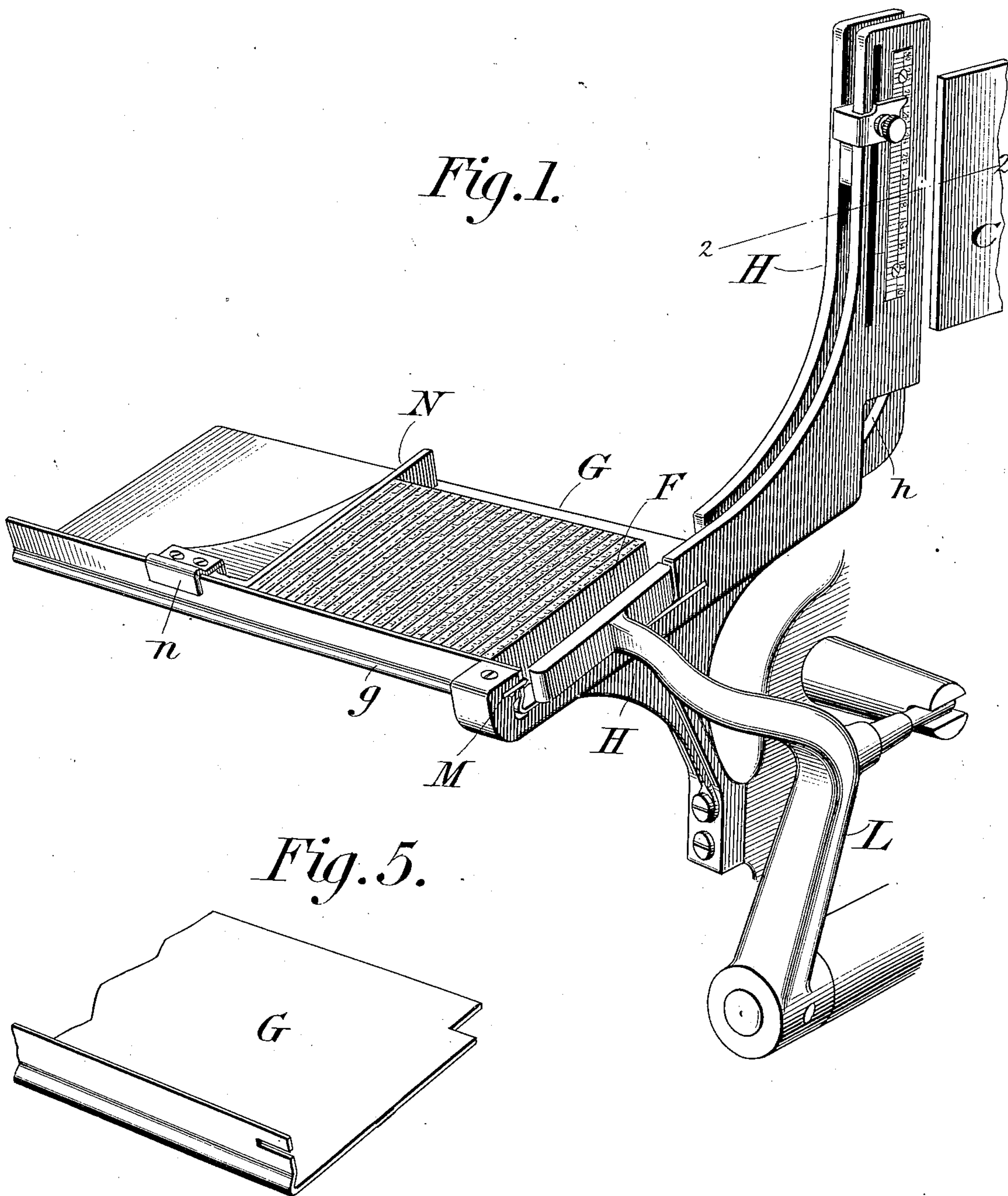
D. S. KENNEDY.

PATENTED APR. 7, 1908.

GALLEY FOR LINE CASTING MACHINES.

APPLICATION FILED JAN. 16, 1908.

2 SHEETS—SHEET 1.



Witnesses
Raymond H. Barnes.
Luther E. Morrison

Inventor
S. S. Kennedy
By P. T. Dodge
Attorney

D. S. KENNEDY.

GALLEY FOR LINE CASTING MACHINES.

APPLICATION FILED JAN. 16, 1908.

2 SHEETS—SHEET 2.

Fig. 2.

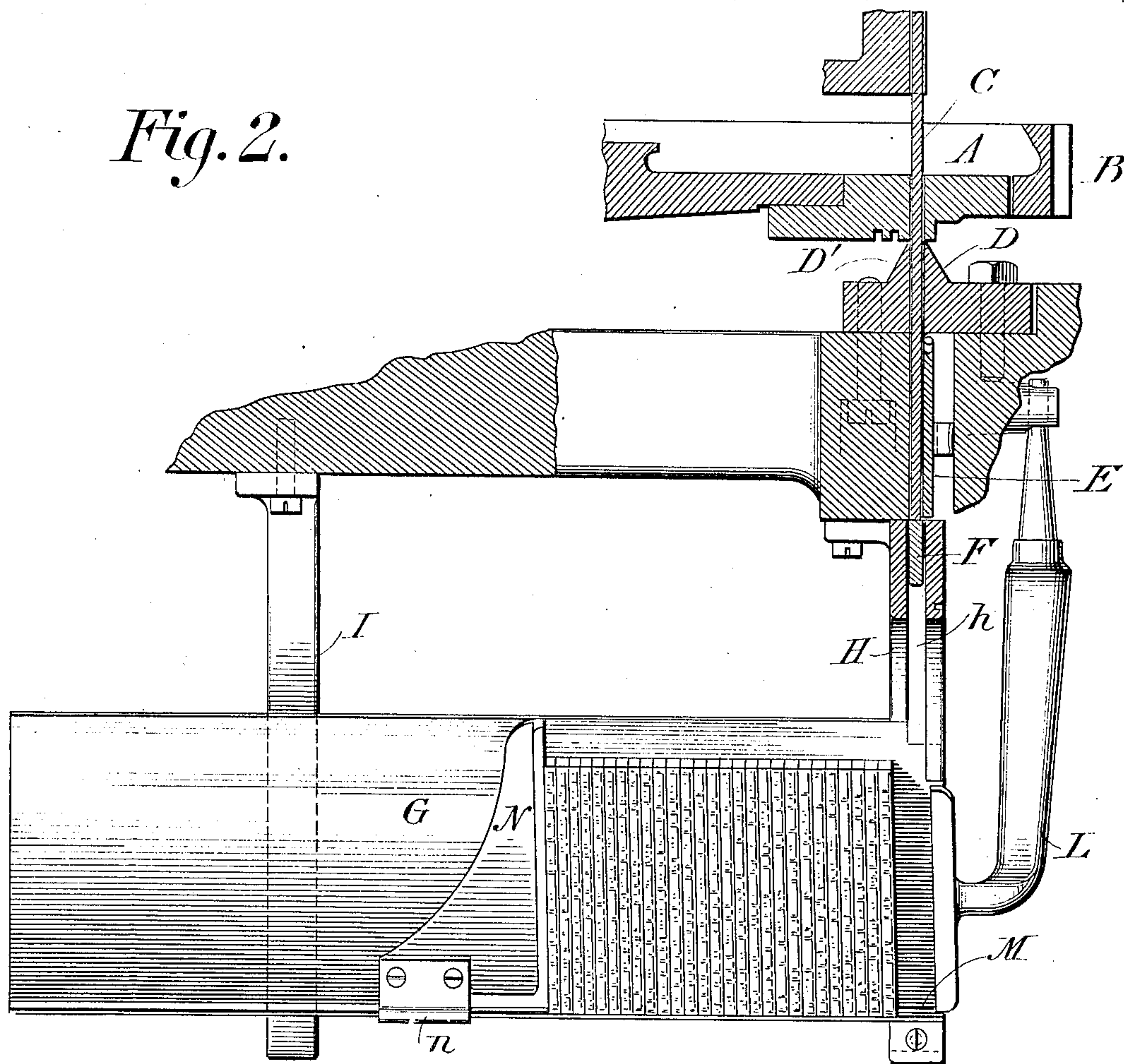


Fig. 4.

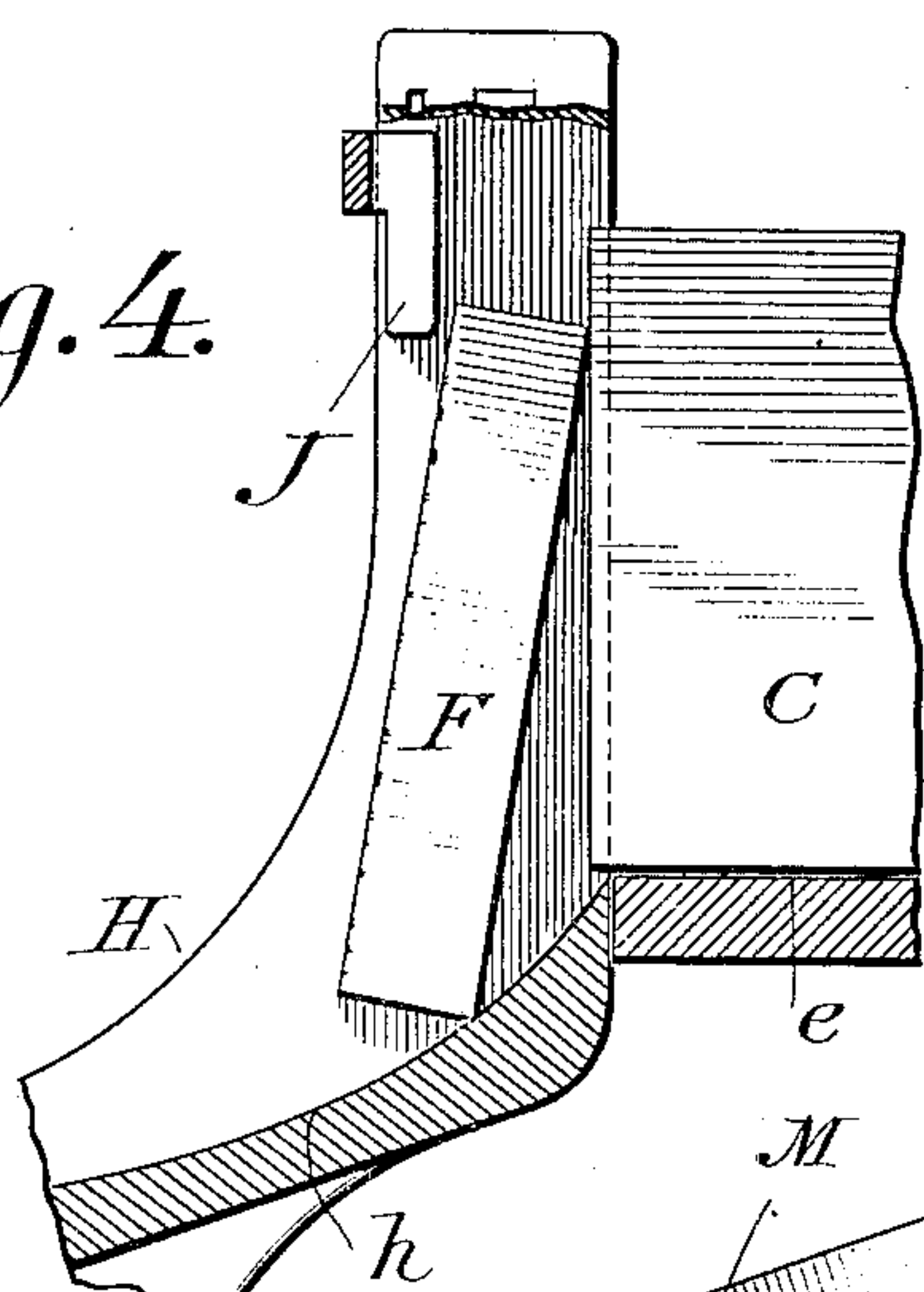
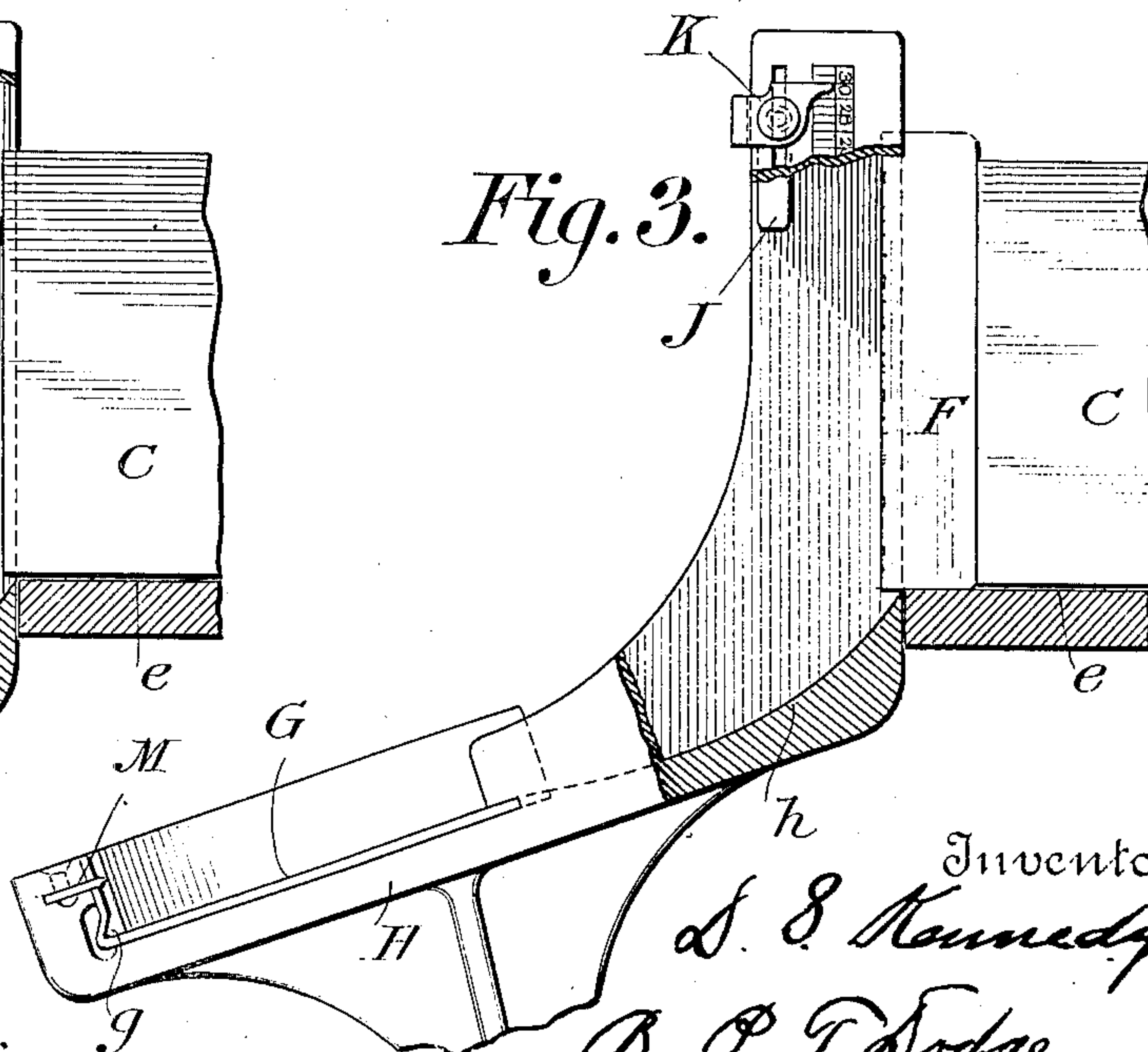


Fig. 3.



Witnesses
Raymond A. Barnes.
Luther E. Harrison

Inventor
D. S. Kennedy
By P. T. Dodge
Attorney

UNITED STATES PATENT OFFICE.

DAVID S. KENNEDY, OF BROOKLYN, NEW YORK, ASSIGNOR TO MERGENTHALER LINOTYPE COMPANY, A CORPORATION OF NEW YORK.

GALLEY FOR LINE-CASTING MACHINES.

No. 884,022.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed January 16, 1908. Serial No. 411,109.

To all whom it may concern:

Be it known that I, DAVID S. KENNEDY, of borough of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Galleys for Line-Casting Machines, of which the following is a specification.

This invention relates to an improved galley for receiving the slugs from line-casting machines of the Mergenthaler type, commonly sold under the trade mark "Linotype", and represented as to their general organization in Letters Patent of the United States #557,000.

The aim is to provide a galley of extreme simplicity and without moving parts, in which the assembled slugs will be supported in plain view of the operator, and in such manner that they may be readily removed and inspected. To this end I provide a stationary guide to receive the slugs as they are ejected from the machine and deliver them downward with a turning motion endwise into an inclined galley at the front, in a manner hereinafter explained.

In the drawings,—Figure 1 is a perspective view of the improved galley in operative position at the front of a commercial linotype machine, together with the ejector-blade, which delivers slugs from the machine, and the lever for forcing the slugs laterally along the galley. Fig. 2 is a horizontal section on the line 2—2, Fig. 1, showing the mold and adjacent parts for delivering the slug from the machine, together with the galley in operative relation thereto. Figs. 3 and 4 are vertical sections on the lines 3—3, Fig. 2. Fig. 5 is a perspective view of one end of the galley proper detached from the supporting-bracket.

Referring to Fig. 2, A represents the slotted mold in which the slugs or linotypes are cast, this mold being mounted in an intermittently rotating wheel B. C represents a horizontally reciprocating ejector-blade, by which the slugs are driven successively out of the mold and between the parallel trimming knives D, D', to the galley at the front of the machine. E is a yielding plate to aid in guiding the outgoing slugs F, which stand, during their delivery, in a vertical position upon an underlying stationary surface *e* forming part of the main-frame.

The foregoing parts may all be constructed

and arranged to operate in the ordinary manner.

Referring now to the subject-matter of my invention, G represents the galley proper, consisting of a flat metal plate having an upturned flange along its forward edge. This galley is sustained in front of the machine on two brackets or supports H and I, secured to the machine and so arranged as to give the galley a downward inclination from the rear edge toward the front, and also a longitudinal inclination downward toward the left, so that the slugs received endwise thereon will be inclined downward endwise toward the front in order that they may be conveniently viewed by the operator, and also inclined laterally toward the left in order to prevent them from rebounding or falling over toward the right into the path of the incoming slugs. The galley is located directly in front of the machine, with the right or receiving end in line with but below the ejector-blade C, and the upper end of the supporting-bracket H is continued from the galley rearward and upward in a slotted or channeled form, its upper vertical end standing in position to receive and guide the slugs as they are delivered by the ejector C.

At its upper end, the bracket is open on the rear, so that the slugs advancing before the ejector-blade may enter freely, but its bottom *h* is closed from the forward end of the slug-supporting surface *e*, and extends downward in a curved path toward the galley, as plainly shown in Figs. 3 and 4. Each of the outgoing slugs is advanced by the ejector into the upper end of the bracket, and from the supporting-surface *e*, in the manner shown in Fig. 3, until finally the lower rear corner of the slug passes off from the surface *e* and onto the inclined surface *h*, whereupon, being no longer supported, the slug slides downward in the manner shown in Fig. 4, its lower surface riding upon and being moved forward by the surface *h*, until finally the slug is received endwise into the galley, face upward. In order to avoid the possibility of the slug tipping forward at the upper end, I mount in the upper slotted end of the bracket a fixed stop J in such position that the upper end of the slug may lie freely between it and the ejector-blade, so that it will offer no resistance to the descent of the slug toward the galley. This stop may be

fixed immovably in position, provided it is carried to a sufficient depth to engage the shortest slugs, and provided the distance between it and the end of the advanced ejector-blade is sufficient to allow the free escape of all slugs regardless of length. I prefer, however, to slot the bracket vertically, and to secure the stop by means of a thumb-screw K, or equivalent fastening, so that it may be raised or lowered and set in position to engage only the extreme upper ends of the outgoing slugs, whatever their length may be. It is to be observed that this stop is not the means for canting or tilting the slug. It is simply a means for preventing its upper end from falling forward accidentally beyond the point to which it is advanced by the ejector. The tilting of the slug is effected not by throwing its upper end backward, but by throwing its lower end forward, through the influence of the inclined supporting-surface.

I believe it to be wholly new to combine with the ejector which delivers the slugs, a stationary stop to retain the upper end of a slug, and a supporting-surface terminated in such position that the lower end of the slug will be carried clear of the mold and delivered to an inclined surface over which it is free to pass to the galley. As the successive slugs enter the galley, they are acted upon and pushed sidewise by the vibratory lever L, corresponding to the so-called slug-lever of the commercial Mergenthaler machines. The upper end of this slug stands normally in a retracted position, and forms a continuation of the outer flange or guide wall of the bracket H. As each slug enters the galley, it stands directly in front of this lever, by which it is pushed laterally and added to the accumulated column, the column being at the same time advanced bodily to the left, so that when the lever L is retracted, a space will exist between it and the end slug sufficient to permit the entrance of the next slug. Owing to the inclination of the galley downward toward the left, and the consequent inclination of the slugs toward the left, they have little or no tendency to rebound sidewise, and it is therefore unnecessary to use any supporting or retaining device to keep them in position and to prevent them from getting into the path of the following slug.

The galley proper may be varied in form provided only it is adapted to receive the slugs guided endwise thereto by the bracket. I prefer, however, to make the galley as shown, of a single sheet of metal, having the lower end turned upward to arrest and support the lower forward ends of the slugs. In order to give additional rigidity and to prevent the accumulation of dust and dirt, I prefer to form an outward bend along the lower corner of the galley, as shown at g. In

applying the galley, it is thrust horizontally endwise into the supporting-bracket, which is recessed to receive it, as shown. In this class of devices, the incoming slugs strike endwise against the lower side of the galley with considerable force, and they are therefore liable to rebound and assume improper positions. To avoid this difficulty, I provide in the lower side of the galley, at the point where the slugs enter, a fixed horizontal blade M, having its edge presented toward the incoming slugs.

In practice, it is found that the slugs striking against the blade are arrested thereby without appreciable tendency to rebound, the slug being slightly indented, but to an extent which is not objectionable. The essence of the invention in this regard consists in employing a stop-device, having a pointed or sharp edge to encounter and arrest the slug. The galley proper is provided with a yielding arm N to support the assembled slugs at the left. This arm is provided with a spring-clip n engaging over the ends of the galley with sufficient strength to hold it in position, but admit of its being crowded backward as the slugs accumulate.

Having described my invention, I claim and desire to secure by Letters Patent,—

1. In a line-casting machine, the combination of an ejector-blade, an inclined surface upon which the lower end of the slug is delivered by the ejector, and a stationary stop in position to encounter the upper end of the slug after the latter is fully advanced by the ejector; whereby the tilting of the slug that it may ride upon its base is effected by the action of the inclined surface and without movement of the stop.

2. In a galley for a line-casting machine, the combination of the galley proper and the slug-guiding bracket having a closed bottom extended upward and rearward in position to receive the lower rear corner of the slug when delivered thereto by the ejector, and having also the upright slotted portion open at the rear to receive the slug, with a rigid stop at the front to guide the upper end of the slug as it descends the inclined surface.

3. A receiving galley for a line-casting machine having a stationary inclined bottom to receive and guide the lower end of a slug, and a stationary stop to arrest the upper end of a slug; whereby the inclined bottom is enabled to effect the tilting movement of the slug.

4. In a receiving galley for a line-casting machine from which the slugs are delivered in a vertical position, a vertically slotted guide to receive the slugs, said guide having at the front a stop to arrest the upper ends of the slugs, and also having at the bottom an inclined slug-supporting surface extended rearward beyond the top guide a distance substantially equal to the width of the slug;

whereby the slug is tilted and caused to advance endwise in an inclined position through the action of the inclined body.

5 5. In a slug-receiving galley, means for directing the slugs endwise into the galley, and a pointed stop to encounter the end of the slugs and prevent their rebound.

10 6. In a galley for a slug-casting machine, the combination of a galley proper, the slotted bracket H having inclined and vertical portions adapted to direct the slugs endwise into the galley, and the stop-blade M.

15 7. The galley G having an upward inclination upward toward the rear, and also an inclination downward toward the left, in com-

bination with the bracket arranged to direct the slugs endwise into the galley, and a vibratory pusher L arranged to advance the successive slugs laterally from the galley; whereby each slug is moved out of the path 20 of the succeeding slug and maintained in position.

In testimony whereof I hereunto set my hand this ninth day of January, 1908, in the presence of two attesting witnesses.

DAVID S. KENNEDY.

Witnesses:

JOHN R. ROGERS,
ROBERT G. CLARK.