

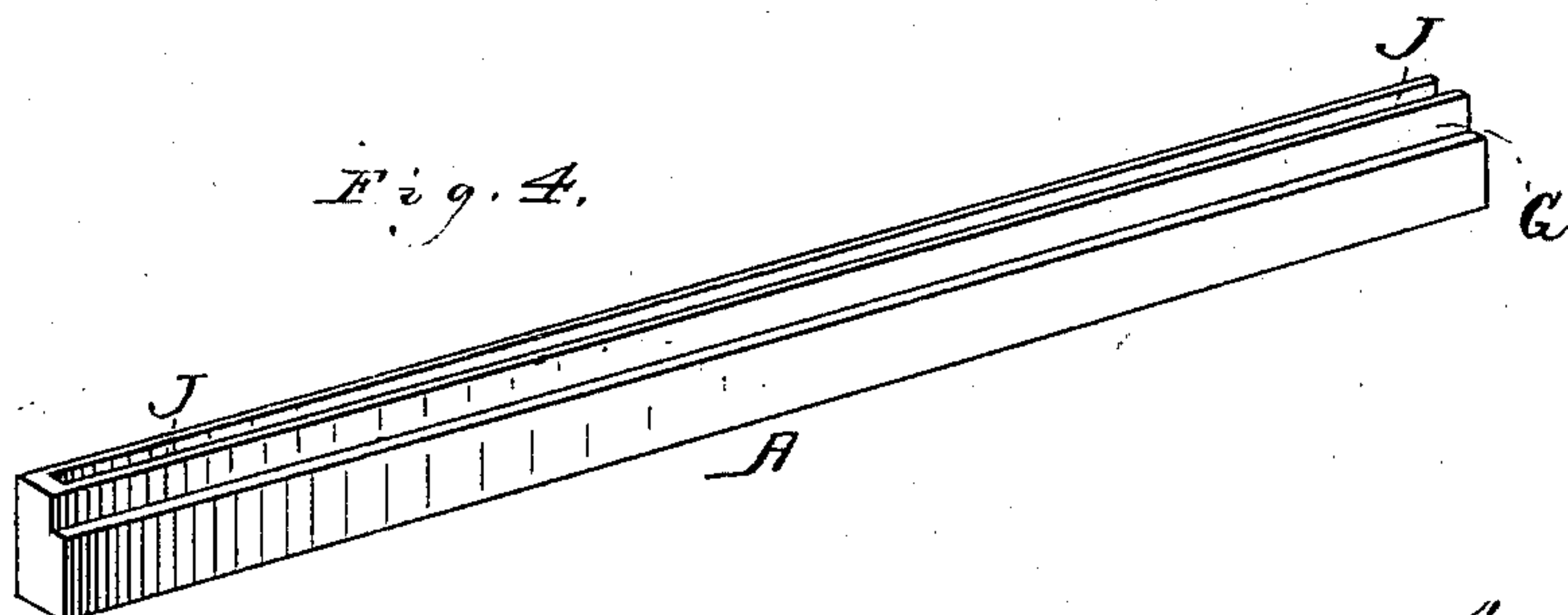
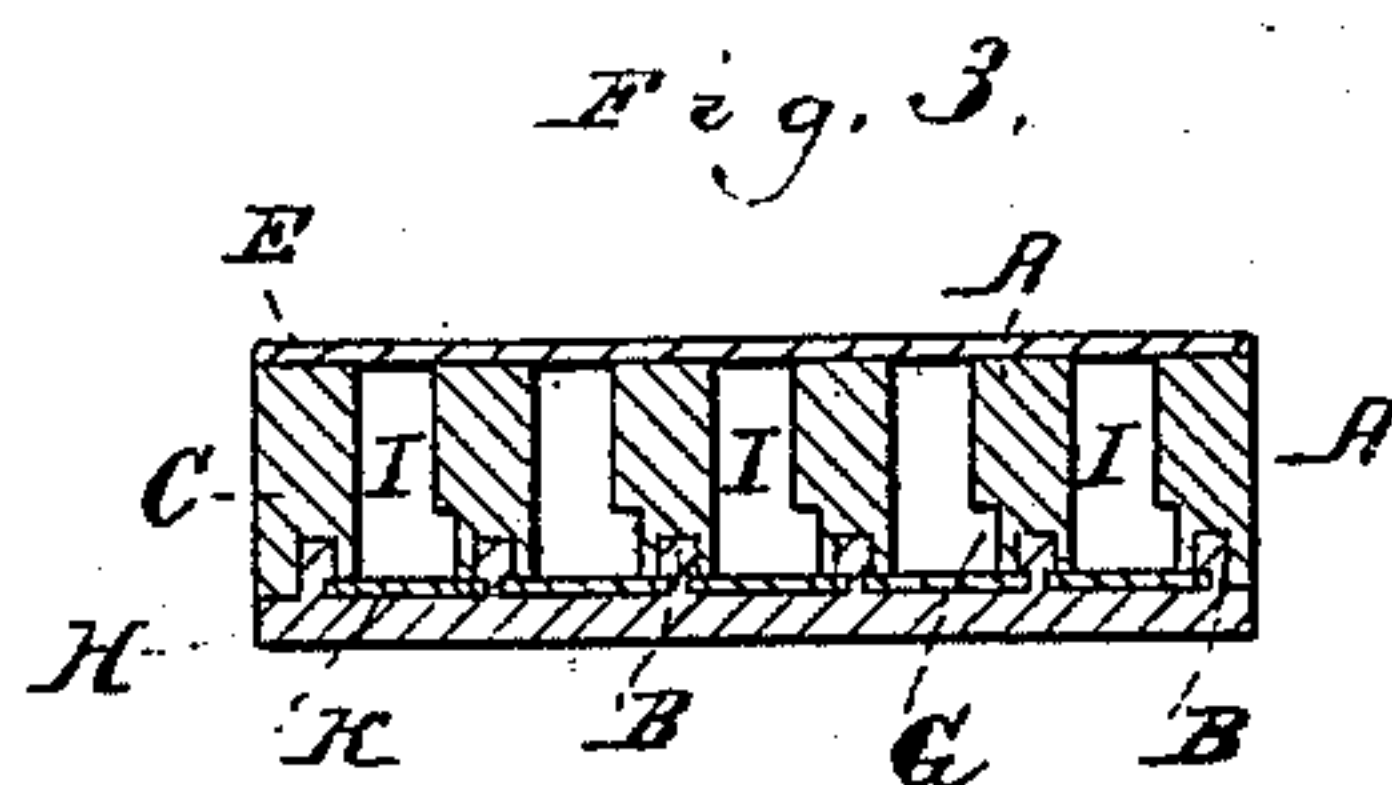
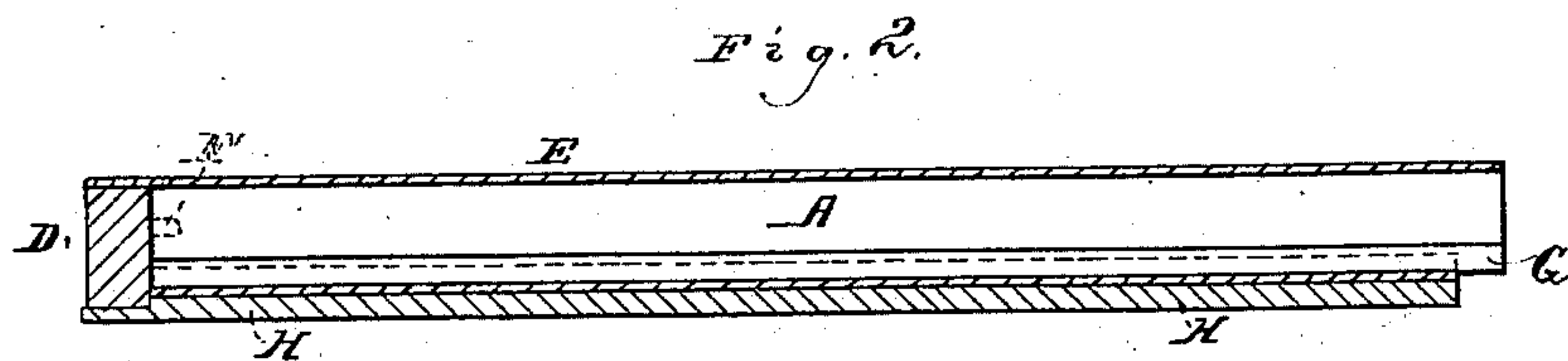
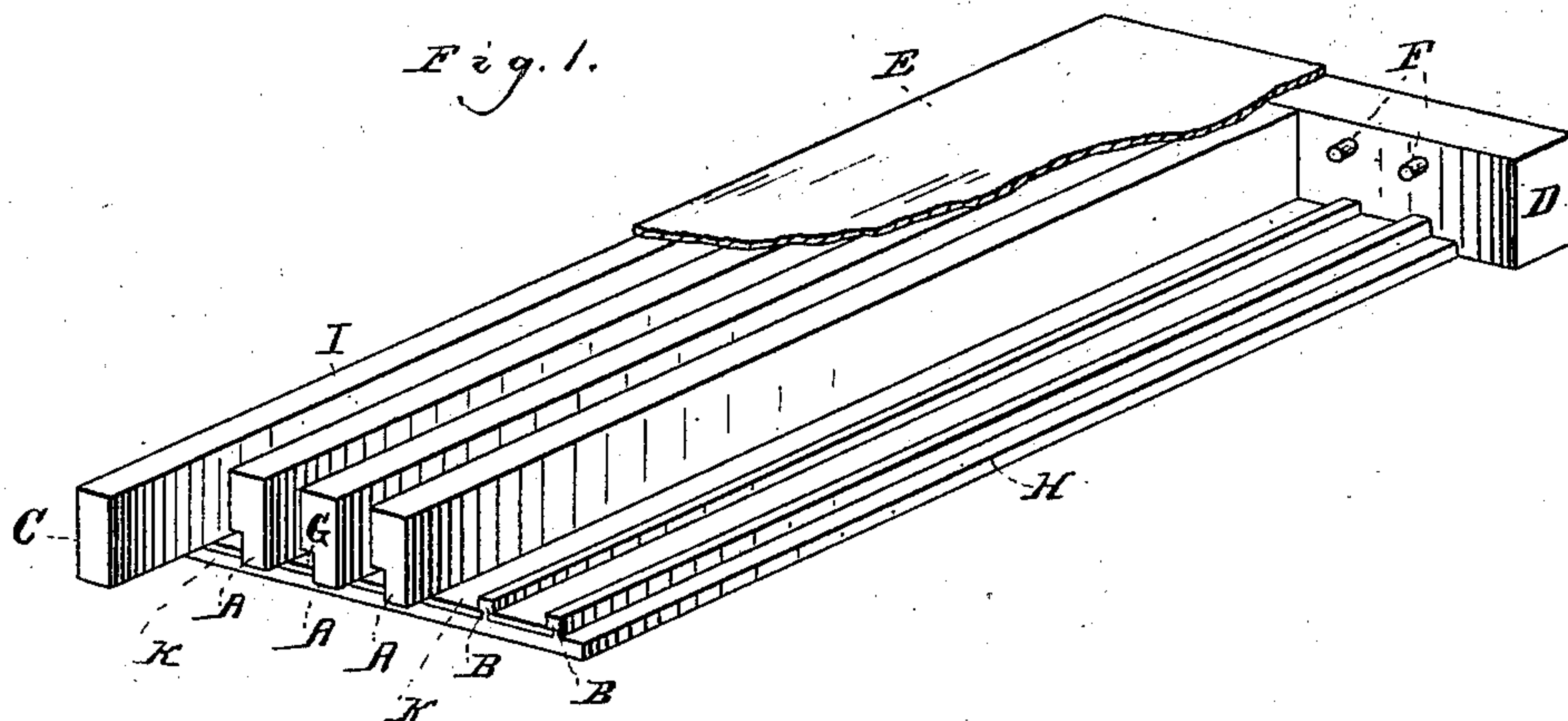
(No Model.)

M. H. DEMENT & A. W. GRANVILLE.

APPARATUS FOR STEREOTYPING MATRIX STRIPS.

No. 285,470.

Patented Sept. 25, 1883.



Witnesses,

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APPARATUS FOR STEREOTYPING MATRIX-STRIPS.

SPECIFICATION forming part of Letters Patent No. 285,470, dated September 25, 1883.

Application filed September 21, 1882. (No model.)

To all whom it may concern:

Be it known that we, MERRITT H. DEMENT and AUSTYN W. GRANVILLE, of the city of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Apparatus for Stereotyping Type Matrix-Strips, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, which form a part hereof.

Our invention relates to the arts of printing and stereotyping; and its object is to provide an apparatus whereby casts can be taken from the strips in bars which are thicker on the type edge than on the other edge, so that when cut or broken up into pieces and run into column or page form there may be supports between the lines to hold the pieces in position, and yet the type or lines be so close together as to form what is termed "solid matter." The necessity for these supports consists, partially, in the fact that it is often necessary, for the purpose of cutting out errors or justifying lines, to break or cut a piece of the type-bar forming a line into a number of pieces and spread them apart; and in case any of these pieces should be opposite an open space in the line above or the line below they would not be held in position. The object is to provide a support which will hold each line firmly in place, and render it easy to remove, change, or add lines without disarranging other lines. To accomplish this we provide, first, a base-plate in which are grooves of the width of the strip, the tongues between the grooves being of sufficient height to have a lip on each side, under which the strip is run and by which it is held in place. Fitted on these tongues are partition-bars, type high, or more or less, as may be desired, having grooves in their lower edges to fit over the tongues in the base-plate. The strips being run in the grooves and the bars being fitted on, the form thus made is placed in an ordinary casting-box, the top screwed down, and the metal poured in, the result being a number of bars of metal with types upon one edge corresponding to the indentations in the strips. In the base-plate with grooves and tongues, and in the bars, as thus described, we claim no novelty.

The type-bars cast in our apparatus will be

narrower on the blank edge than on the type edge. This we accomplish by cutting one side of each partition-bar bevel-shaped, making it narrower at the bottom, or by cutting a shelf longitudinally in the lower corner, as shown at G in the drawings. It follows that, as these bars form the sides of the mold, the type metal bars will take form accordingly and be wider at the type edge than at the other, because of the bevel or shelf thus formed upon them in casting; and such bars may be readily cut or broken up and put in page or column form as solid matter, the lines, and pieces of type-metal composing lines, being held in position by supports occupying the cavity made by the narrowing of the bars.

We prefer to cast the type-bar with a shelf, as shown in the drawings; but any casting in any shape which narrows the type-bar so as to make room for supports comes within the spirit of our invention.

It is not essential that the base-plate should be grooved, as there are several ways in which the strips can be held in position. For instance, the bottom edge of the bars may have a tongue instead of a groove, as shown at J in Fig. 4, the strip being run between the tongues of two bars, the overhanging portions of the bars serving to hold strip in place.

In another application we shall describe a mechanism intended to be used in putting the type-bars in column or page form.

In the annexed drawings, Figure 1 is a perspective of the improved casting-box, showing grooves for five strips with three partition-bars in position. Fig. 2 is a side view of a bar in position. Fig. 3 is an end view of casting-box. Fig. 4 is a perspective of a bar, showing groove in bottom edge.

A A are partition-bars; B, the tongues in plate between which the strip is run. C is the side of casting-box. D is the lower end piece, with pins F, to fit in end of bars to hold them in position. E is the cover. G is the recess in bars. H is the base-plate. I represents the mold in which metal is poured, and J is the groove in the bottom of bar.

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

1. An apparatus for casting recessed type-

bars from type matrix strips or sheets, consisting of a suitable base-plate and cover, and a series of recessed partition-bars, substantially as shown and described.

5 2. In a casting-box for stereotyping from type matrix strips or sheets, partition-bars recessed so as to form type-bars wider at the type edge than at the opposite edge, substantially as and for the purposes shown and
10 described.

3. The combination of the type-indented strip or sheet, casting-box, and partition-bars recessed so as to form type-bars wider at the type edge than at the other edge, substantially as and for the purposes shown and described. 15

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