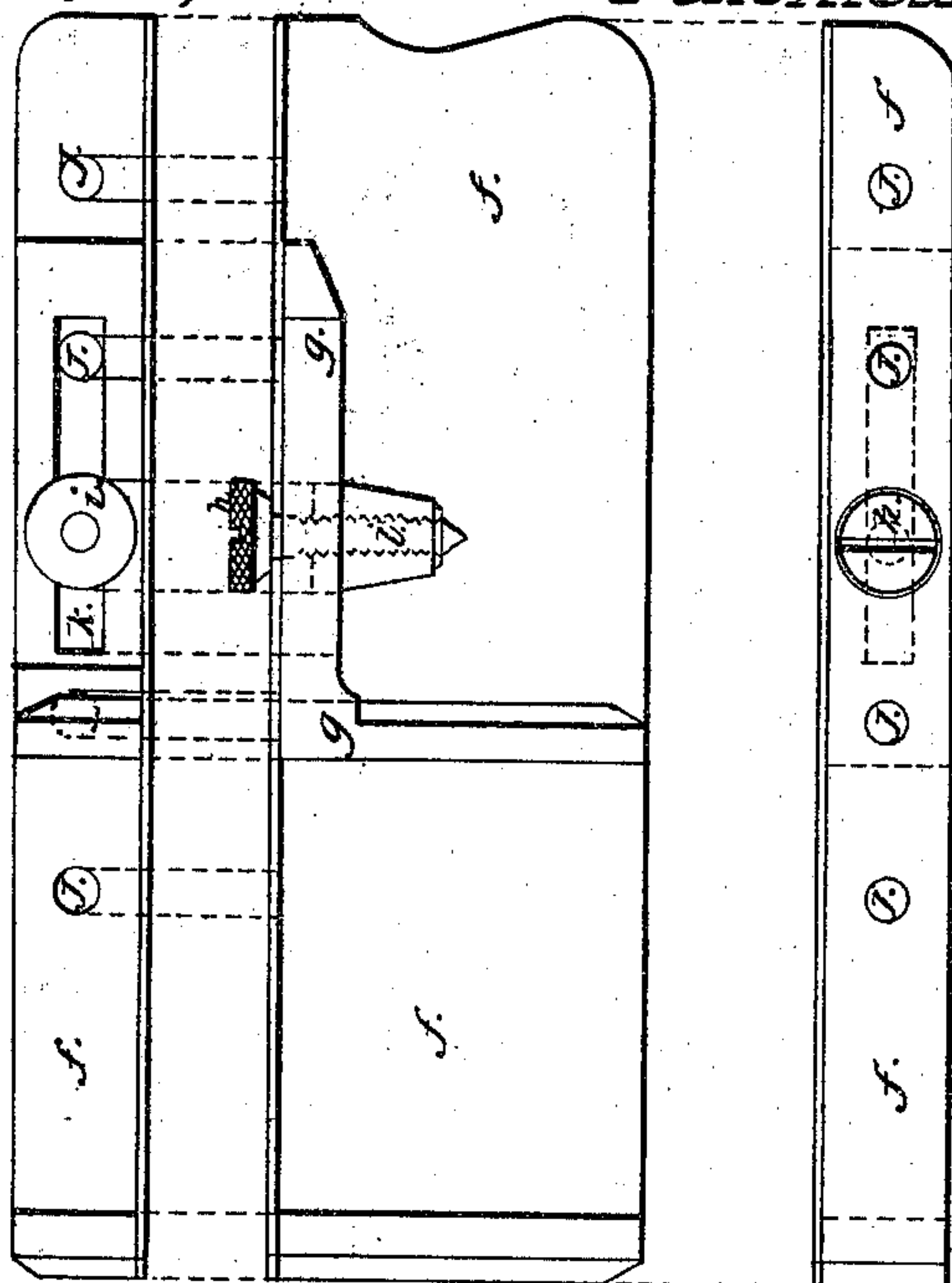


*D. Winder*  
*Composing Stick.*

*N<sup>o</sup> 17007*

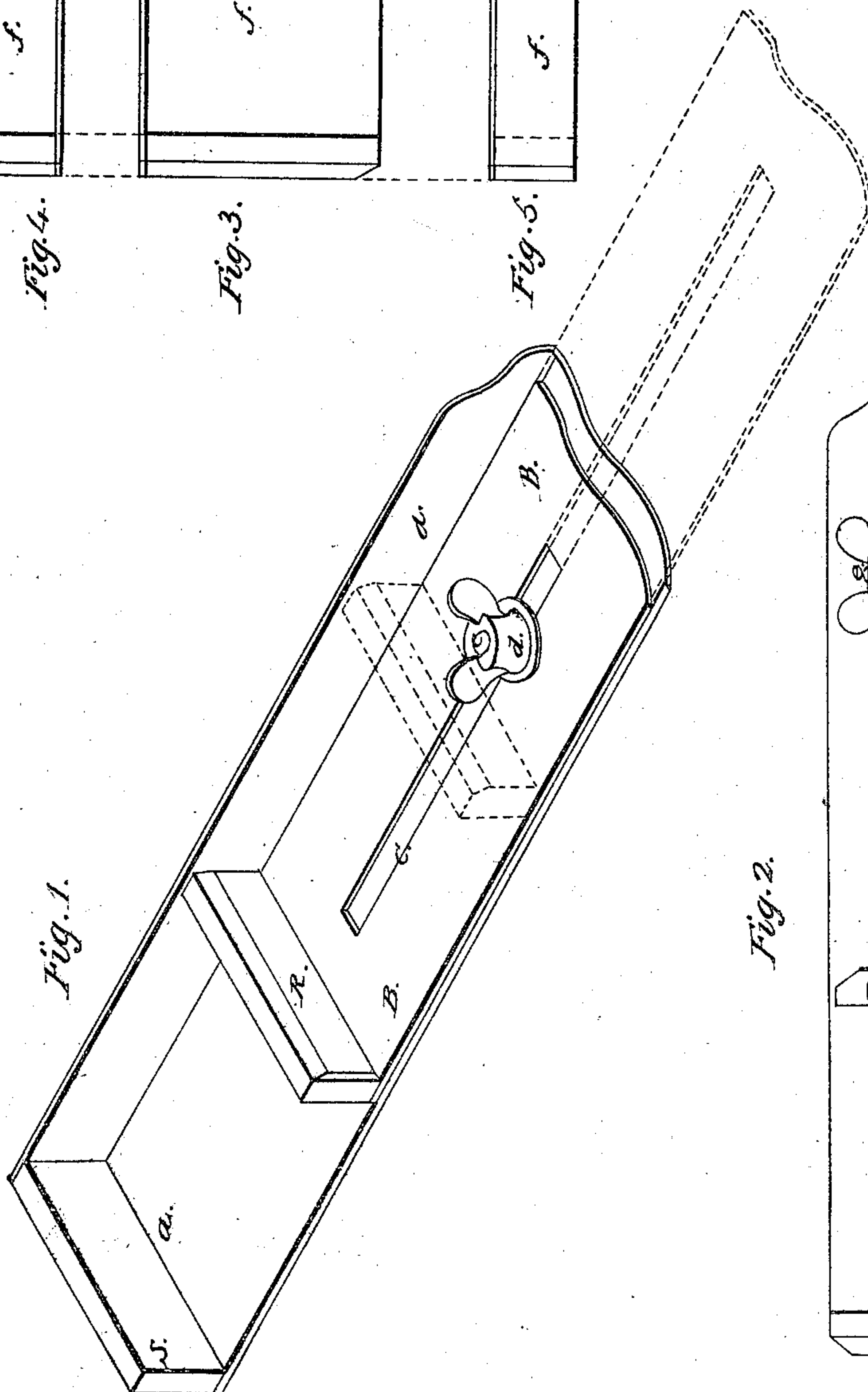
*Patented Apr. 7. 1857.*



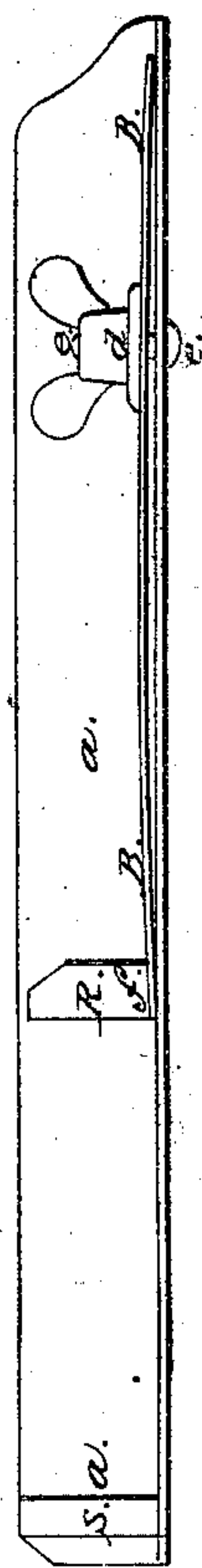
*Fig. 4.*

*Fig. 3.*

*Fig. 5.*



*Fig. 1.*



*Fig. 2.*



# UNITED STATES PATENT OFFICE.

DANIEL WINDER, OF CINCINNATI, OHIO.

## PRINTER'S COMPOSING-STICK.

Specification of Letters Patent No. 17,007, dated April 7, 1857.

*To all whom it may concern:*

Be it known that I, DANIEL WINDER, of the city of Cincinnati, county of Hamilton, and State of Ohio, have invented a new and  
5 useful Improvement in Printers' Composing-Sticks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference  
10 marked thereon and made to form part of this specification.

Similar letters refer to like parts of the improvement.

The nature of my improvement consists  
15 in the structure, arrangement, and combination, of the parts of the composing stick by which I produce one more durable, and yet can be made cheaper than any before ever came into use, and not as liable to get out of  
20 order, can be handled without chafing, or otherwise injuring the compositor's hand when being used, and its parts can be adjusted with one another without the aid of a screwdriver or wrench, as is commonly  
25 used with the ordinary composing stick, which latter advantage particularly arises from the structure and arrangements of its parts together, and when my improved stick is set for a large form it can be handled  
30 equally as well as when set for a small one, which is not the case with the stick now in use as will be fully shown hereafter, when reference is being made to the accompanying drawings.

35 To enable others skilled in the art to make and use my improvement, I will proceed to describe its construction, and operation by referring direct to the accompanying drawings of which,

40 Figure 1, is a perspective view of the improved composing stick, and Fig. 2, is an edge view of the same, and Figs. 3, 4, and 5, are different views of the composing stick now in universal use of which Fig. 3, is a  
45 face view, Fig. 4, an inside edge view, and Fig. 5, an outside edge view.

A, A, represents the stock of the improved stick, with one of its edges turned up and forming its back, and one end provided with  
50 a block of metal S, riveted or otherwise fastened to the stock.

B, B, is a spring slide and furnished with a slat, C, and provided with a block of metal, R, at its end as represented by uniting  
55 or otherwise attaching it to the spring. The slat in the spring passes over the screw bolt

(e) attached to the stock (A) as fully represented, and the spring plate B, B, can be moved, adjusted, and held by the thumb screw (d) so that its end (R) can be ad- 60  
justed to any distance from the end (S) of the stock (A) to suit any size or length of form that may be required to set up, that will come within the limits the stick is calculated for. 65

The spring given to the plate, B, B, as may be fully seen by reference to Fig. 2, serves a very important purpose. By the spring of the plate there is a resistance given to the thumb screw (d) which is 70  
always sure to hold the plate to its place by its friction with the screw that can be produced with the naked hand by the thumb screw (d) against the spring plate and with the structure and arrangement of the spring 75  
plate with the stock A, A, and screw,—the use of a screw driver, or wrench for screwing the plate to the stock is dispensed with, as is to be necessarily used with the structure of the old composing stick, and accom- 80  
panied with the loss of time to the compositor.

f, f, Fig. 3, represents the stock in the old composing stick, g, g, the slide, and held to its place by the screw (h) and nut (i); the 85  
screw is made to pass through the holes J, J, J, in the back of the stick, and through the slat K, in the slide.

It must be seen when it is required to move the slide, g, g, beyond a given distance, 90  
that the screw (h) is shifted from one hole, J, to another to obtain the right distance between the slide, and end of the stock, f, for the forms, (which is dispensed with in my improvement,) and the slide g, g, having no 95  
spring, the screw (h) for holding it to the stock, f, must always be firmly screwed with a screw driver, or wrench, to its proper place, which the structure of my improvement dispenses with. And by the wrench- 100  
ing and screwing of the bolt (h) against the back of the stock, f, f, it springs and twists the back out of truth, when made of a reasonable size which throws the slide (g) at an angle with the end of the stock f f—or 105  
the slide (g) and end of the stock will not be parallel, and thus gives an improper shape to the form being set up.

In the old composing stick, as represented, the back is perforated with a succession of 110  
holes (J) large enough to admit the adjusting screw (h) which weakens the back and



renders it easily bent and put out of order. In the improvement the back is left solid and is therefore much stronger and susceptible of a much better finish for the hand of the compositor to move against. In the old stick the nut has to be removed, and the bolt shifted from one hole to another in many instances in order to adjust the stick to pages, or columns, which makes it necessary to use a screw driver, lay the stick down, and lose considerable time. In the improvement the stick can be adjusted to any rule within its capacity in an instant without any tools and without the necessity of the compositor leaving his post, by the arrangement of the spring plate B, B, before stated. In the old stick the adjusting bolt (*h*) is constantly in the way of the hand, and obstructs its passage back and forth in following the point of composition in the line. It not only chafes the fingers but often causes the compositor to print an unfinished line. In the improvement these objections are entirely obviated as the adjusting screw is located at a point where the hand or fingers never come in contact with it.

The extended bearing of the side of the spring B, B, against the back of stick, secures a true angle or square in the box formed by the two heads which are always parallel without any attention in adjusting them.

The spring plate B, B, or slide serves as a handle when it is extended out as represented by dotted lines in Fig. 1, which makes the improved stick as easily handled when setting up a long form as a short one, which is not the case with the old stick, as will be readily seen by referring to the drawing—that the slide *g, g*, could never be used for that purpose.

What I claim as my improvement and desire to secure by Letters Patent is—

The combination and arrangement of the several parts of the composing stick as constructed with each other, all as and for purposes specified and represented in the foregoing specification.

DANIEL WINDER

Witnesses:

M. BENSON,  
GEORGE MCGREGOR.