

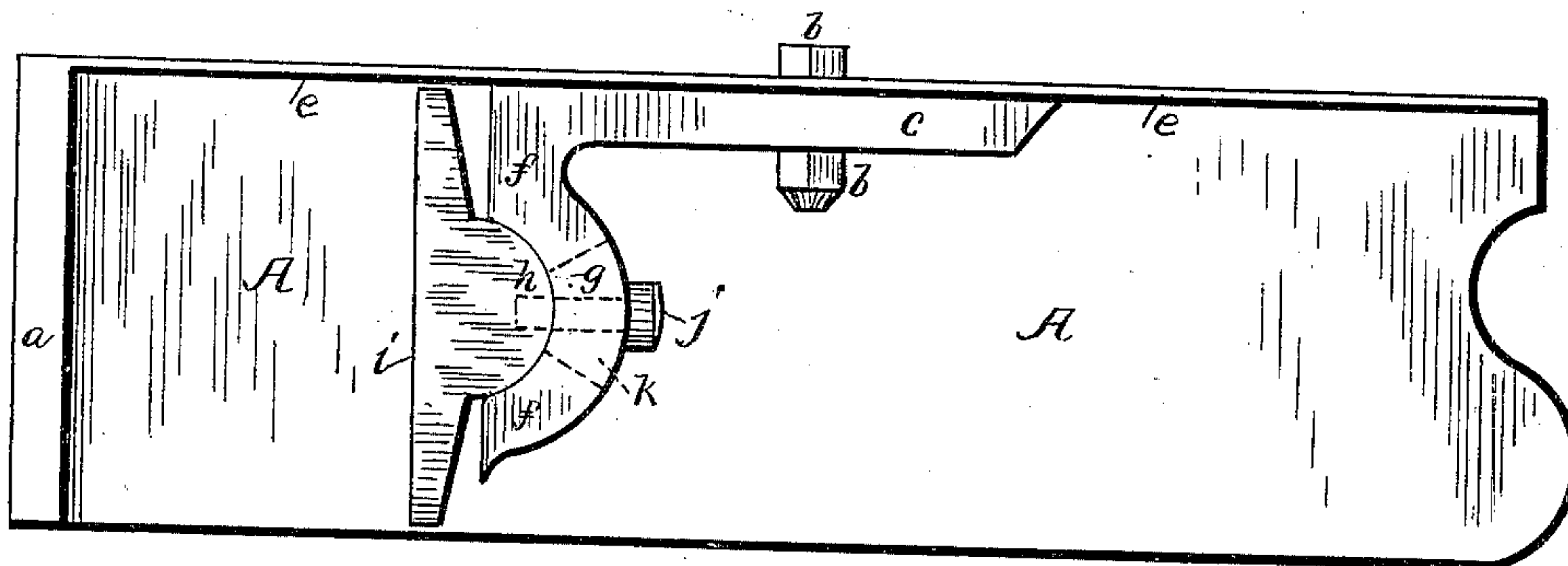
(Model.)

V. SPERLE.  
COMPOSING STICK.

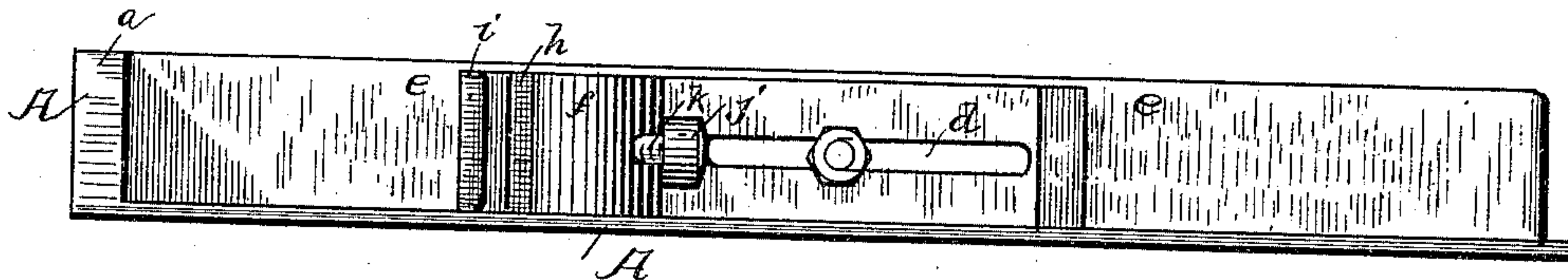
No. 409,518.

Patented Aug. 20, 1889.

*Fig. 1.*



*Fig. 2.*



Witnesses:  
Josiah W. Ellis  
H. M. Lewis

Inventor.  
Val. Sperle  
Per O. D. Lewis  
att'y.

# UNITED STATES PATENT OFFICE.

VALENTINE SPERLE, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO JAMES B. PEARSON AND FRED E. YOUNGS, OF SAME PLACE.

## COMPOSING-STICK.

SPECIFICATION forming part of Letters Patent No. 409,518, dated August 20, 1889.

Application filed July 1, 1885. Serial No. 170,396. (Model.)

*To all whom it may concern:*

Be it known that I, VALENTINE SPERLE, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain  
5 new and useful Improvements in Composing-Sticks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make  
10 and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved composing-stick for printers' use. In the old  
15 form of stick the face of the adjustable knee is used to gage the length of the lines of type, and should be always parallel to the inner face of the end piece of the stick-frame. It is found in practice that after a stick has  
20 been used for some time the knee becomes permanently bent out of truth, and the lines of type will not be of the same length, or, in other words, the faces of the knee and end piece are not exactly parallel. By my im-  
25 provement I do not prevent the knee from becoming bent, as that would require too great a weight of metal, but provide it with an adjustable face, which can be set to compensate for any deflection of the knee.

30 In the annexed drawings, Figure 1 is a plan of my improved composing stick, and Fig. 2 is a side view of the same.

A designates the main frame of the stick, having adjustably secured to it by a bolt *b* an  
35 angular piece or knee *c*, having a longitudinal slot *d*, which allows it to be adjusted endwise; or, instead of the slot in the knee-piece, it may simply have one or more holes, and a slot may be cut in the back of the main  
40 frame A, which will permit of the same adjustment. The head *f* of this angular piece

or gage *c* is provided with a segmental recess *g*, in which a corresponding segmental projection *h* on an adjustable piece *i* is placed, said projection being larger than the recess *g*,  
45 and secured fast to the head *f* by any suitable means. I show as one way the bolt *j*, which is passed through a flaring slot *k* in the curved portion of the knee *c* and threaded into the projection *h* of piece *i*. The adjustable piece  
50 *i* may now be set perfectly parallel with the end face of the main frame A by simply loosening the bolts and sliding the knee or gage up to the end face of the main frame A and fastening the bolt *b*, when the gage may now  
55 be set to any desired width or size, and the stick will be ready for the reception of the type. This adjustment may be made at any time when the knee becomes bent, or whenever desired.

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

1. In a composing-stick, an adjustable knee provided with a curved recess in its head and  
65 a flaring slot through it, in combination with the adjustable piece provided with a rounding projection on its inner side and a clamping-bolt, which passes through the flaring slot and locks the adjustable piece in position,  
70 substantially as shown.

2. In a composing-stick, the combination of a slotted and recessed knee with the adjustable piece, which is fastened to the knee at  
75 its center only, whereby the two ends of the adjustable piece can be moved alike, substantially as described.

VALENTINE SPERLE.

Witnesses:

W. C. BARR,  
JOSIAH W. ELLS.