

(No Model.)

D. F. SAUM.
WRITER'S ALIGNING GUIDE.

No. 490,086.

Patented Jan. 17, 1893.

Fig. 1.

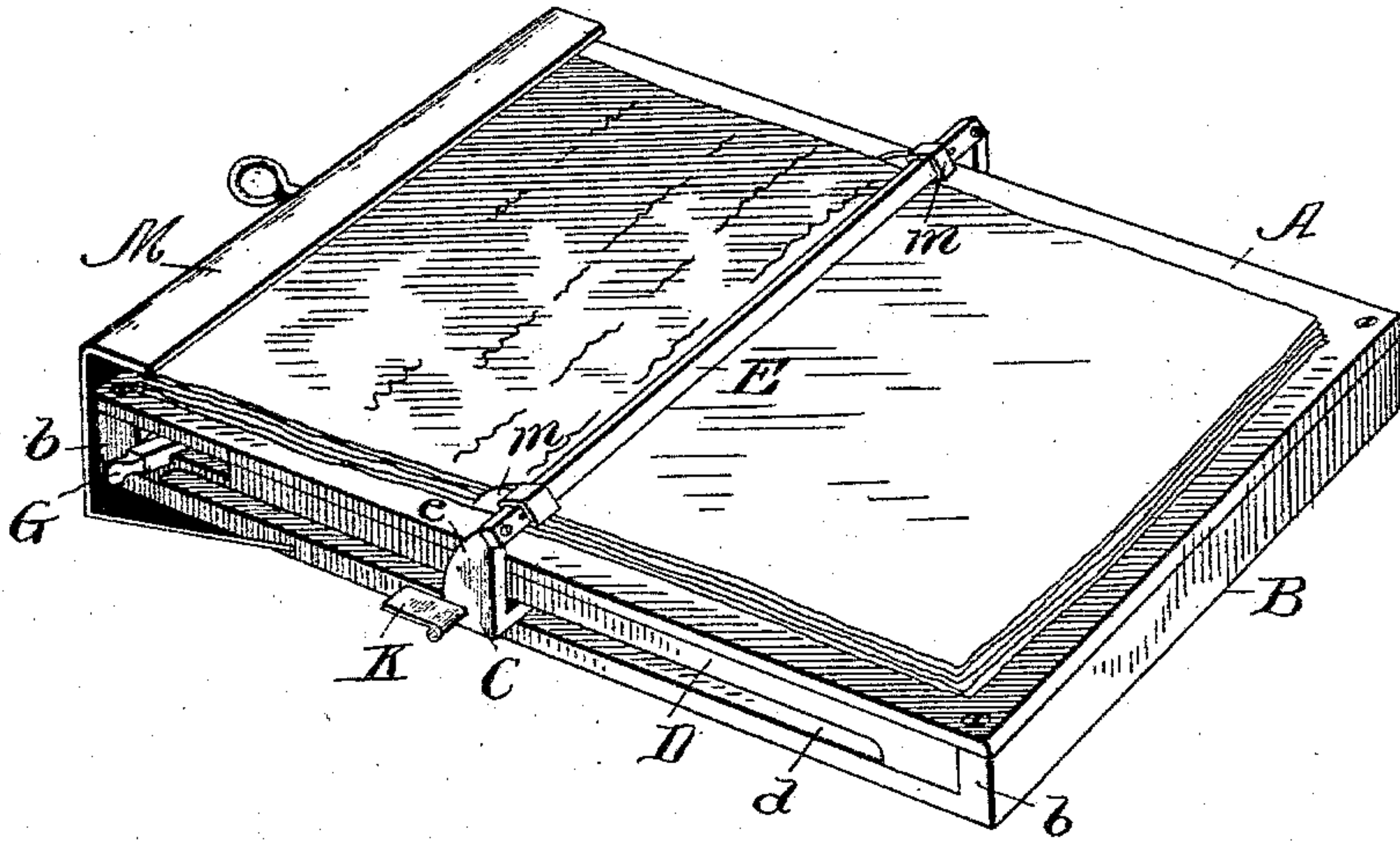


Fig. 2.

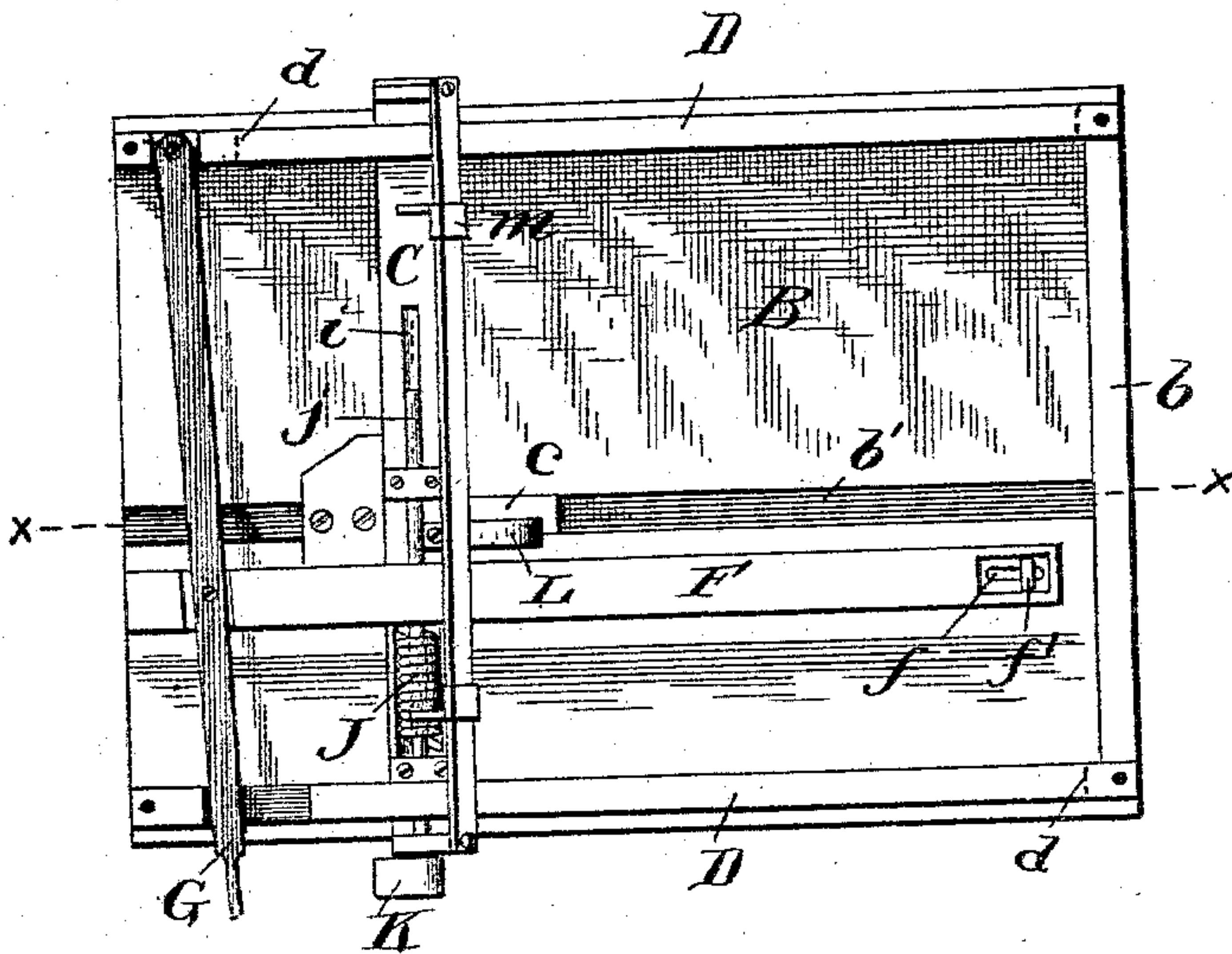
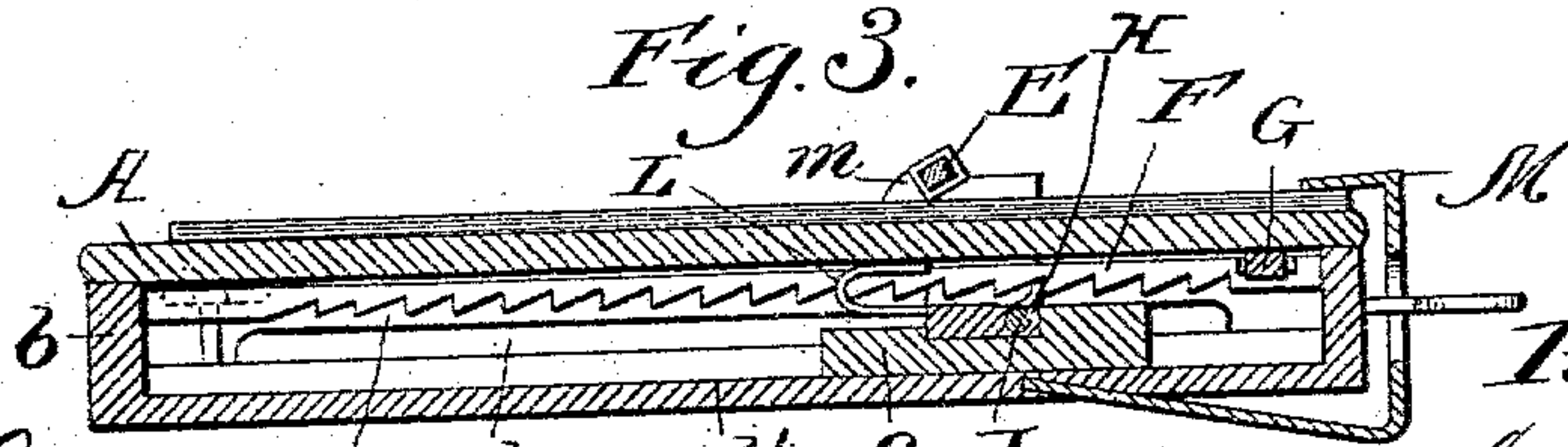


Fig. 3.



Witnesses:

J. B. M. Givv.

W. B. Banting

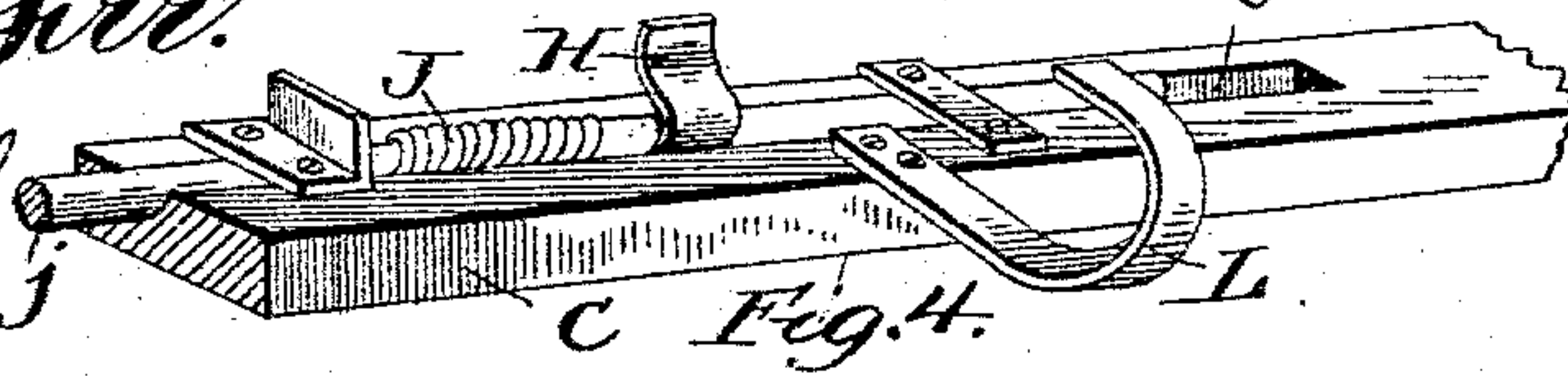


Fig. 4.

Inventor.

D. F. Saum

By Edwin B. Banting,
Attorneys

UNITED STATES PATENT OFFICE.

DAVID F. SAUM, OF WASHINGTON, DISTRICT OF COLUMBIA.

WRITER'S ALIGNING-GUIDE.

SPECIFICATION forming part of Letters Patent No. 490,086, dated January 17, 1893.

Application filed May 14, 1892. Serial No. 433,053. (No model.)

To all whom it may concern:

Be it known that I, DAVID F. SAUM, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Writers' Aligning-Guides; 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 appertains to make and use the same.

The object of my invention is to furnish an aid to writers, the device being more particularly adapted for use by persons temporarily or permanently deprived of their eye-sight, and designed to guide the pen or pencil in straight lines across the paper and to space the lines at regular or uniform distances along the length of the paper.

With these ends in view, the invention consists in the combination of a base, a top above the same, a movable slide guided on the base and carrying an elevated hand guide which extends across the top pawl and ratchet mechanism arranged below the top and adapted to move said slide and guide at regular intervals, and a release key connected to the pawl to throw the same out of engagement with the rack and enable the slide and hand guide to be returned to their initial positions.

My invention further consists of the combination and construction of parts which will be hereinafter fully described and particularly pointed out in the claims.

The invention is fully illustrated in the accompanying drawings, forming a part hereof, and in which—

Figure 1 is a perspective view. Fig. 2 is a plan view with the top removed. Fig. 3 is a longitudinal sectional view with the top in place, on the plane indicated by the dotted line $x-x$ of Fig. 2. Fig. 4 is a detail perspective view of a part of the slide showing the spring rock shaft, the pawl, and the friction spring.

Like letters of reference denote corresponding parts in the several figures of the drawings, referring to which—

A designates the top and B the bottom of my device, which parts are preferably made flat and of the form shown, although this is not strictly necessary. The bottom B is provided with the vertical raised flanges or ledges

b, b , across the ends thereof, and on these ledges rests the top A, which may be secured in place on the bottom in any suitable way, as for instance, by screws.

In the top side or face of the bottom B, I provide a longitudinal groove b' , which is arranged in the middle of the bottom and preferably extends from end to end thereof; and in this groove or way is fitted a tongue c of the slide C which extends across the bottom and through longitudinal slots d, d , formed in the battens D, D, which are secured to the bottom B along the sides thereof. On the protruding ends of the slide C are the rigid upright lugs or supports e arranged outside of the top and bottom, and to these lugs or supports is secured the hand guide E which preferably consists of a rigid piece of any suitable material.

The guide strip or piece is supported by the lugs on the slide above the top A for a suitable distance to permit paper or a tablet to be placed on the top A, and said strip is arranged in an inclined position relative to the top A so that the hand or fingers can rest or ride against one side of said guide strip while the two first fingers and thumb of the hand are free to have the necessary movements over said guide strip to write upon the paper or tablet on the top A. The guide strip serves to guide the hand in writing from one side to the other of the paper so that the line of writing extends in a practically straight line across the paper; and to prevent the successive lines of writing from running into one another I provide mechanism for regularly moving the hand guide and the slide with a step by step movement down the length of the paper. This mechanism consists of a feed rack, F, a lever G for operating the rack, and a pawl H carried by the slide and held by a spring in engagement with the rack. The rack is arranged beneath the top, extending from end to end thereof, and in the lower side of the bar are formed the ratchet teeth shown in Fig. 3; and in the lower end of this ratchet bar is formed a longitudinal slot f in which fits the pin f' which is secured in the bottom B and serves to limit the back and forth movements of the rack bar. To the other end of the rack bar is pivoted the operating lever G arranged transversely across the bottom, and

one end of this lever is fulcrumed on the bottom while the other end projects beyond the side of the device so that said protruding end of the lever can be easily grasped in order to reciprocate the rack bar.

In the upper side of the slide C is provided a longitudinal recess *i*, and in this groove fits the rock shaft *j* which is journaled in suitable bearings on the slide, said rock shaft having the pawl H rigidly secured thereto in position to engage with one of the teeth of the rack bar. Around the rock shaft is fitted the coiled spring J, having one end secured to said shaft and the other end to the slide; and the outer end of this rock shaft carries an exposed release key K which lies at one side of the device in position to be easily depressed by the finger in order to throw the pawl out of the path of the teeth on the rack bar, so that the slide and its attached parts can be easily returned to their initial positions.

To keep the slide securely in place and prevent any loose motion of the parts, I employ a friction spring L which is attached to the slide and has its free arm bent to ride and bear against the lower face of the top A, thus keeping the slide in its depressed proper position. The motion of the hand in either direction across the paper on the top is limited by means of the stops *m, m*, which are carried by the hand guide; and said stops may be adjustably secured to the hand guide by any suitable means.

Any suitable form of clip M may be used to hold the paper or tablet firmly in place on the top A.

In operation, the paper is adjusted and clamped on the top A, and the slide is moved toward the upper end of the top. The device is now in position for use, and in writing the third or fourth fingers of the hand ride against the guide strip while the other fingers and thumb are free to move over the guide strip so that the writing can be easily accomplished and the words will be arranged in a straight line across the paper. After one line has been written, the lever G is moved by hand to reciprocate the rack bar, which, being engaged with the pawl, serves to move the slide and the hand guide a limited distance which is sufficient for proper spacing of the written lines, and the parts are now in position for the operator to write another line; and the operation of feeding the guide is continued until the entire page has been written upon or as much as is desired or necessary. The slide and guide can now be returned to their initial positions at the top of the page by simply depressing the release key to lower the pawl out of the path of the teeth on the rack bar and moving the slide along the bottom. The slide, and consequently the hand guide, is kept in position by means of the central groove *c* and the slots *d* in the side pieces, and the rack bar is held in position by the lever and the pin *f'* working in the slot *f* of said rack bar.

I am aware that changes in the form and proportion of parts and details of construction of the devices herein shown and described as an embodiment of my invention may be made without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

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

1. A writer's guide comprising a suitable top or writing surface, a slide, a raised hand guide arranged across said top and connected to said slide by intermediate supports, and pawl and ratchet feeding devices connected to the slide for moving the latter and the hand guide, substantially as and for the purpose described.

2. A writer's guide consisting of a base, an elevated top, a slide guided on the base and carrying a raised hand guide which extends from side to side across the top, and feeding devices arranged below the top and connected to the slide to move the latter with a step by step movement, as and for the purpose described.

3. A writer's aligning guide comprising a suitable base, a top, a slide guided on the base and carrying an elevated hand guide, feeding devices arranged below the top and connected to the slide, and a release key at one side of the top and connected to the feeding device, to throw the same out of action and enable the slide and guide to be readily returned to any desired position, as and for the purpose set forth.

4. A writer's aligning guide comprising a suitable base and top, a slide guided thereon and carrying an elevated hand guide above said top, means for moving said slide with a step by step movement, and a release key adapted to throw the feed mechanism out of action to return the slide and guide to their initial positions, substantially as and for the purpose described.

5. A writer's guide comprising a suitable base and top, a slide guided in said base and carrying an elevated hand guide, a rock-shaft on said slide provided with a pawl, a reciprocating rack bar engaged with the pawl, and a lever for moving said rack-bar, substantially as and for the purpose described.

6. The combination of a suitable top and base, a slide guided in said base, a hand guide above said top and base and carried by the slide, a reciprocating rack bar guided on said base, a lever connected to the rack bar, and a spring-controlled rock shaft carried by the slide and having the pawl and the release key, substantially as described.

7. The combination of a suitable base and the top, the slide guided on the base and fitting in the slots at the sides of the base, the hand-guide above said top and fixed to the slide, a rack-bar and means for moving the

same, a rock shaft carrying a pawl, and a friction spring for holding the slide in place, substantially as described.

5 8. A writer's guide, comprising a base having a central way and the guide slots, a top, a slide fitted in the way and slots, the rock shaft journaled on the slide and carrying the pawl, the hand guide above the top and rigidly secured to the slide, a rack bar guided on
10 the base above the slide, and a lever con-

nected to said rack bar to reciprocate the same, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID F. SAUM.

Witnesses:

WILLIAM O. BELT,

H. T. BERNHARD.