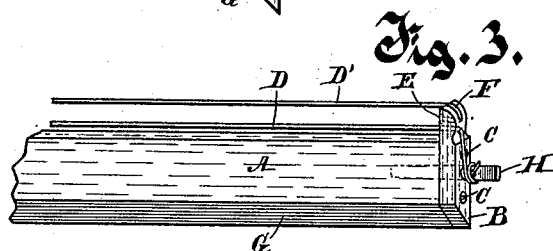
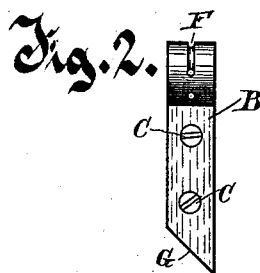
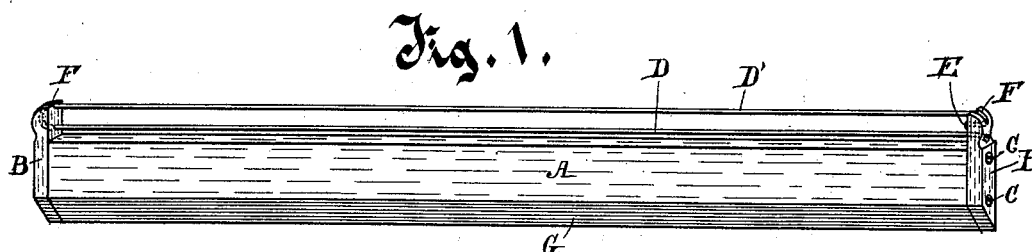


(No Model.)

A. L. BAER.
RULER.

No. 420,401.

Patented Jan. 28, 1890.



Witnesses.

C. W. Keeney,
Anna Faust.

Inventor.

Abraham L. Baer
By Erwin Reusch
Attorneys.

UNITED STATES PATENT OFFICE.

ABRAHAM L. BAER, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF
TO PAUL ASCH, OF SAME PLACE.

RULER.

SPECIFICATION forming part of Letters Patent No. 420,401, dated January 28, 1890.

Application filed May 7, 1889. Serial No. 309,936. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM L. BAER, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Ruler; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The device which I have invented is especially adapted for the use of book-keepers in closing columns of figures or in ruling near to the bottom of pages, and is also valuable as providing a narrow straight edge at a distance from the paper on which the lines are to be made, being so constructed that the user can see the line as it is being made when the ruler is on either side of it.

In closing a column of figures it is the usual practice of book-keepers to rule a single line at the foot of a column and a double line below the footing, for the purpose of closing the account, and my device is particularly adapted for this work, being so constructed that all these lines can be made without removing or changing the place of the ruler on the book.

In the drawings, Figure 1 is a perspective of my improved device. Fig. 2 is an end view of the ruler without the wire affixed. Fig. 3 shows a modified form of the device providing means for tightening the wire. Fig. 4 is a modified form of the ruler.

In the drawings, A is a bar, preferably made of wood, forming the body of the ruler. To each end of this bar A a metal bracket B is rigidly affixed, preferably, by means of the screws C C, passing therethrough and turning into the body of the ruler. These brackets B B project beyond the edge of the ruler at one side, and are provided with apertures through which a wire D is passed, being drawn tight and straight and fastened at each end to one of the brackets B. The wire is very small, being preferably such as is known as "No. 25," and can be readily drawn tight.

A convenient form of ruler—such as is shown in Fig. 1—is constructed by inserting the end of the wire in the bracket B at E, and

carrying it over the top of the bracket in a groove F and across over the other bracket in a similar groove F and through an aperture nearer to the body of the ruler and back again to the bracket from which the wire started, in which bracket both ends are made fast by riveting the wire or plugging the apertures with wedges or equivalent means. The inner strand D of the wire is located near to the body of the ruler, and the outer strand D' is as far away from strand D as the distance between the lines of ordinarily-ruled writing-paper, so that a line can be ruled by a pen against one strand of the wire on one line of the paper, and another line can be ruled by the pen against the other strand of the wire on another line across the paper; and it will be understood that if the ruler is placed across the lower end of a column of figures, so that a line can be ruled at the bottom of them alongside the strand D, a double line can be ruled at a distance therefrom about equal to the distance between the two lines of ruled paper by the pen drawn on both sides of the strand D'. For a possible convenience in some cases, I also preferably bevel the opposite edge G of the ruler.

As a satisfactory way of fastening the wire, and of conveniently tightening it should it become necessary, I use a short pin H, somewhat larger toward its outer end than at its inner end, thrust into an aperture therefor in the bracket B, and provided with flat faces for placing a key thereon, whereby it can be rotated. When the pin H is used, one end of the wire is rigidly affixed to the bracket, and the other end of the wire, after passing through the farther bracket, is carried down to and is secured upon the pin H, so that by rotating the pin the wire will be coiled about it and may be drawn tight thereby, and will be held in position by the friction of the pin in the bracket.

For the purpose of ruling single lines only, a ruler is constructed having one strand of wire only, and for other purposes where it is required I construct a ruler with three or more strands, such as is shown in the modified form, Fig. 4. The body part of this ruler may be constructed of metal, in which case the bracket

ets B B could be made integral with the body part, though such construction is not deemed as desirable as the one heretofore described, since a metal body would be subject to considerable variations in length by reason of contraction and expansion in different temperatures, and also because a ruler constructed entirely of metal would be rather heavy and unpleasant to handle.

10 What I claim as new, and desire to secure by Letters Patent, is—

1. A ruler consisting of a body part having brackets projecting beyond one edge at both ends and one or more wires secured to the
15 brackets and stretched between them at a distance from the body part of the ruler, substantially as described.

2. The combination, with the body part A of a ruler, of brackets B B secured thereto,
20 one at each end and projecting beyond the edge of the body part, and a wire in one or more strands secured at one end to a bracket and at the other end secured to a pin H, turning in the bracket, whereby the wire is adapted to
25 be tightened, substantially as described.

3. The combination, with the body A of a ruler, of two brackets B B, one secured to each end and projecting at one side beyond the edge of the body part A, and a wire in two strands stretched from one bracket to the
30 other bracket and secured thereto, the two strands being at such a distance apart as to permit the insertion of a pen in its holder between them, substantially as described.

4. The combination, with the body of a
35 ruler A, of two brackets B B, secured fixedly to the body of the ruler, one at each end thereof projecting beyond the edge of the ruler at one side and a small wire secured at its ends to one of the brackets and passing to and
40 about a part of the other bracket, forming two strands of straight wire at a distance from the body of the ruler and from each other, substantially as described.

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

ABRAHAM L. BAER.

Witnesses:

C. T. BENEDICT,
ANNA FAUST.