C. D. SIGSBEE.

Parallel-Ruler.

No. 224,962. Patented Feb. 24, 1880.

Fig. 1.

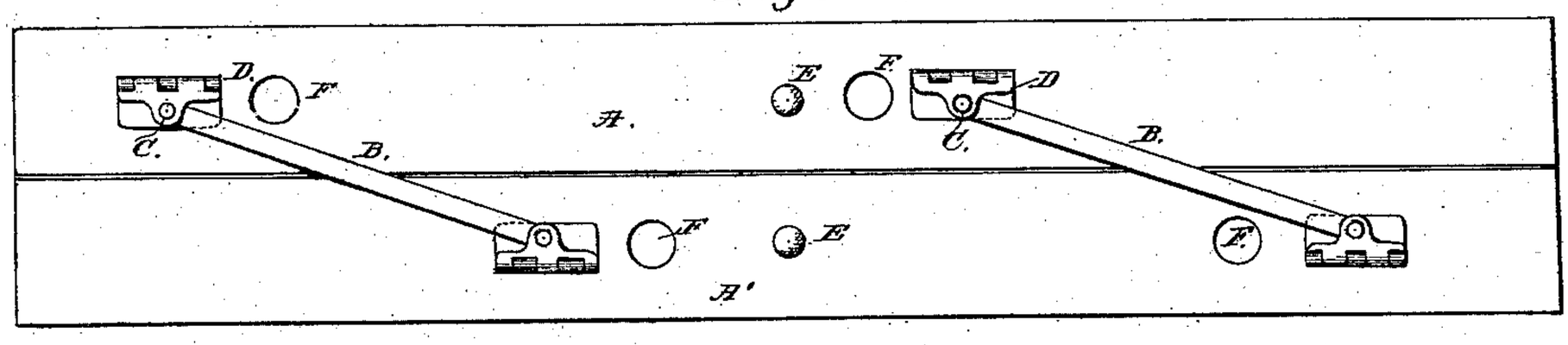


Fig. 2.

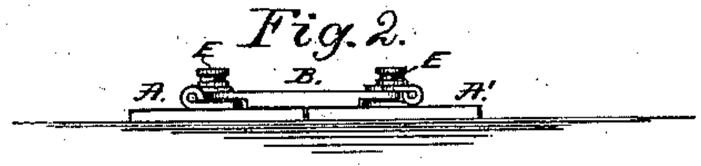


Fig. 3.

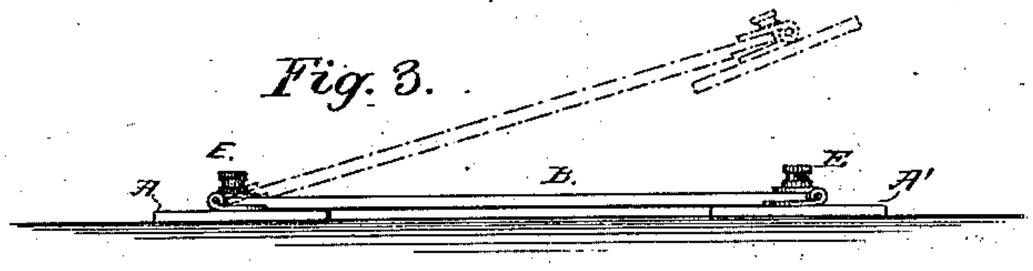


Fig. 4.

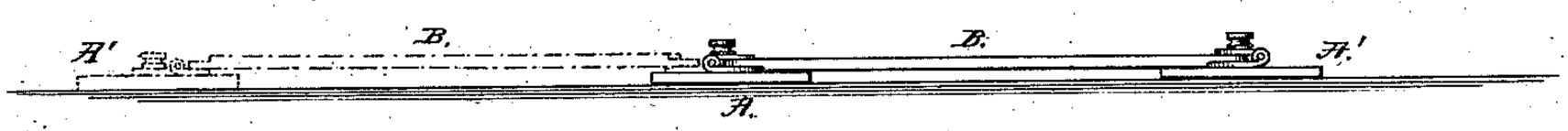
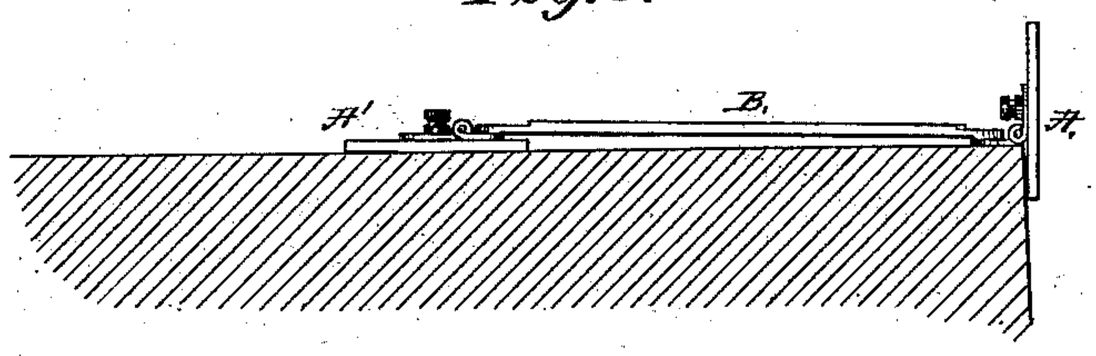


Fig. 5.



WITNESSES

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CHARLES D. SIGSBEE, OF WASHINGTON, DISTRICT OF COLUMBIA.

PARALLEL RULER.

SPECIFICATION forming part of Letters Patent No. 224,962, dated February 24, 1880.

Application filed November 7, 1879.

To all whom it may concern:

Be it known that I, CHARLES D. SIGSBEE, of Washington, in the county of Washington and District of Columbia, have invented certain new and useful Improvements in Parallel Rulers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to certain improvements in the construction of parallel rulers.

It has for its objects to adapt them to be lifted from a horizontal plane without disturbing their parallelism, and also to provide a means for readily securing the portion which is to remain at rest against accidental movement; and with these ends in view my invention consists in connecting the two blades or ruler portions by links, the ends of which are hinged and pivoted to the blades, so that either end of the links may move in arcs transverse to each other, as will be hereinafter more fully set forth.

My invention further consists in perforating the ruler portions at two or more convenient points, so that when in use the end of the workman's fingers and thumbs will form a slightly-protruding friction-cushion, as will be hereinafter more fully set forth.

In all parallel rulers with which I am familiar no means have been provided by which one portion of the ruler could be lifted from the surface with which the other portion is in contact without disturbing such contact and running the risk of breaking parallelism.

My invention overcomes the objectionable features of construction referred to, and enables me to lift one portion above the other to pass any obstruction, or to carry said portion entirely over the other, or to put the bearing-surfaces of the two rulers at right angles to each other.

In order that those skilled may know how to make and use my improved ruler, I will proceed to describe the same more in detail, referring by letters to the accompanying drawings, in which—

Figure 1 is a plan view of a ruler embodying my invention; Fig. 2, an end view of the same; Fig. 3, a similar view with the two portions of the ruler separated, the dotted lines illustrating one portion lifted above the plane occupied by the other. Fig. 4 is a view similar to Fig. 3, the dotted lines showing one portion as having been carried entirely over the other and located at the opposite side; and Fig. 5 is an end view, showing one portion of the ruler arranged at right angles to the plane occupied by the other upon a drawing-board or other flat surface.

Similar letters indicate like parts in the several figures.

A A′ are the two rulers, which are connected together by links B B, the ends of which are pivoted at C to hinges D, the articulations of which are at right angles to the articulations at the pivots C. Suitable knobs E E are secured to the rulers A A′, by means of which the latter are readily moved or manipulated.

F F are holes formed in the rulers, and of such dimensions and location that the ends of the thumb and second finger of the workman will, when using the ruler, penetrate sufficiently to produce a friction-cushion against the surface upon which the ruler rests, and thereby hold it against accidental displacement.

It will be observed by reference to Fig. 1 that the hinges D are closed, or that their wings are parallel, while in Fig. 3, as represented by dotted lines, the wings are slightly spread, and in Fig. 4 in dotted lines they are shown as fully open or distended.

It will be readily understood that the links B, while they serve to maintain the parallelism of the rulers A A′, also serve as the arms upon which the portions A A′ are swung in planes at right angles to the position occupied when at rest.

Another peculiarity of the construction is illustrated by the fact that both edges of each of the portions A A′ may be used without obstruction as working-surfaces, which could not be the case with rulers as at present constructed.

Fig. 4 of the drawings is designed to show the use of my improved ruler to obtain a line parallel to the edge of a drawing-board without depending upon the eye.

I do not wish to confine myself to the precise connections illustrated in the drawings, as I may, without departing from the spirit of

my invention, connect the links to the rulers by a ball-and-socket or any other joint which will enable me to obtain the desired movements of the rulers; nor do I wish to confine myself to the number or location of the finger-holes, or to any given size thereof, it only being necessary that they should be of such size and location that the pressure of the fingers over them will form a cushion, as hereinbefore stated.

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

1. A parallel ruler the blades of which are connected by hinged or pivoted links, in the manner described, whereby the blades are capable of deflection, as and for the purposes hereinbefore set forth.

2. The blades of the ruler provided with two or more holes of suitable size, and arranged as described, so that in placing the fingers over them in the natural position to hold the ruler the ends of the fingers will form cushions to prevent slipping, substantially as described.

In testimony whereof I have hereunto set my hand this 1st day of November, 1879.

C. D. SIGSBEE.

In presence of—

WM. C. MCINTIRE,

F. W. SMITH, Jr.