

No. 677,777.

Patented July 2, 1901.

H. GOLDMAN.
PARALLEL RULER.

(Application filed Dec. 6, 1897.)

(No Model.)

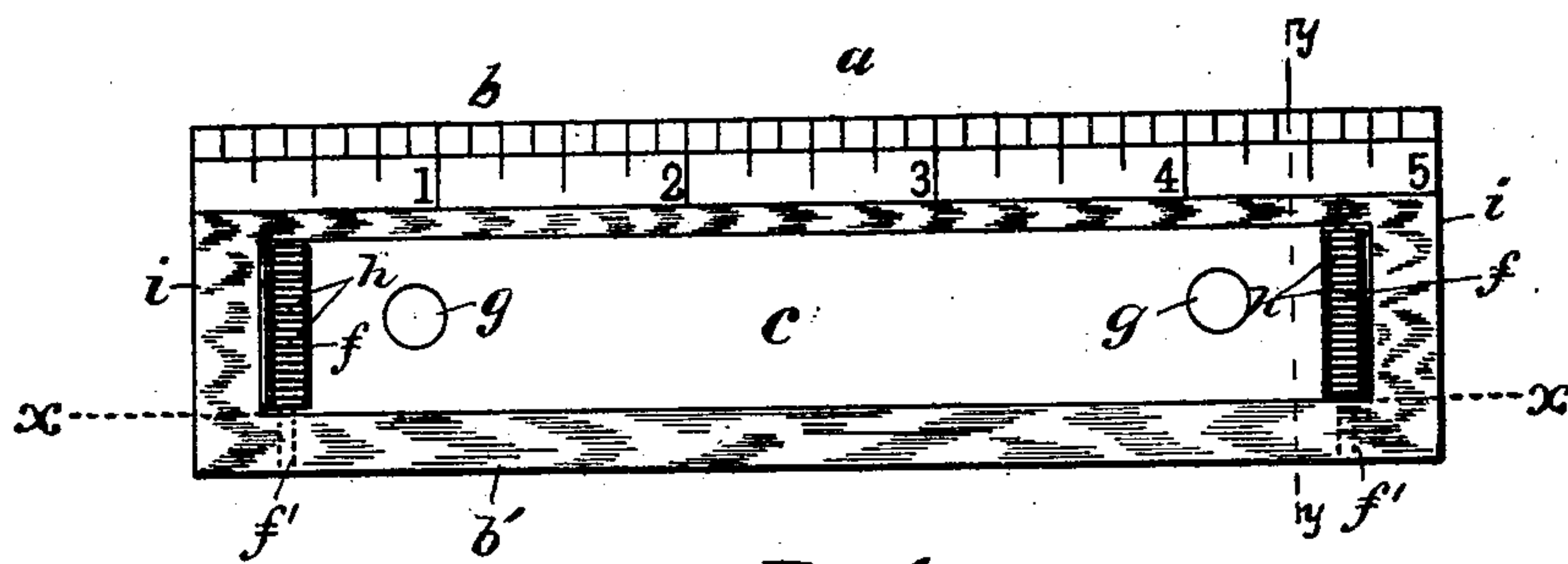


Fig. 1

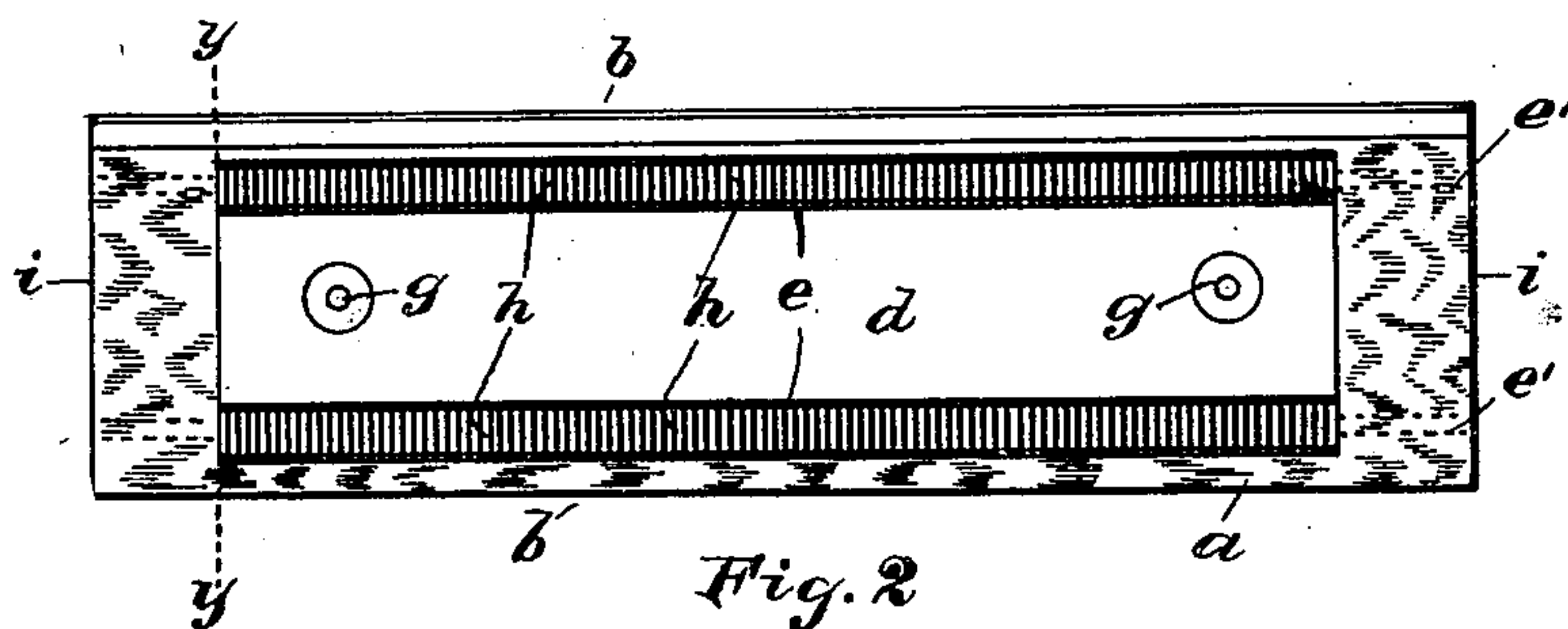


Fig. 2

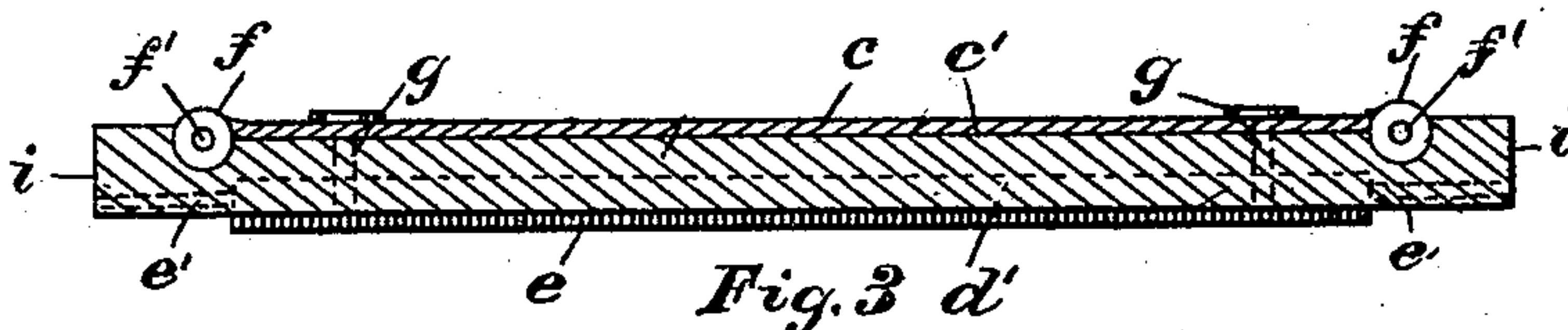


Fig. 3

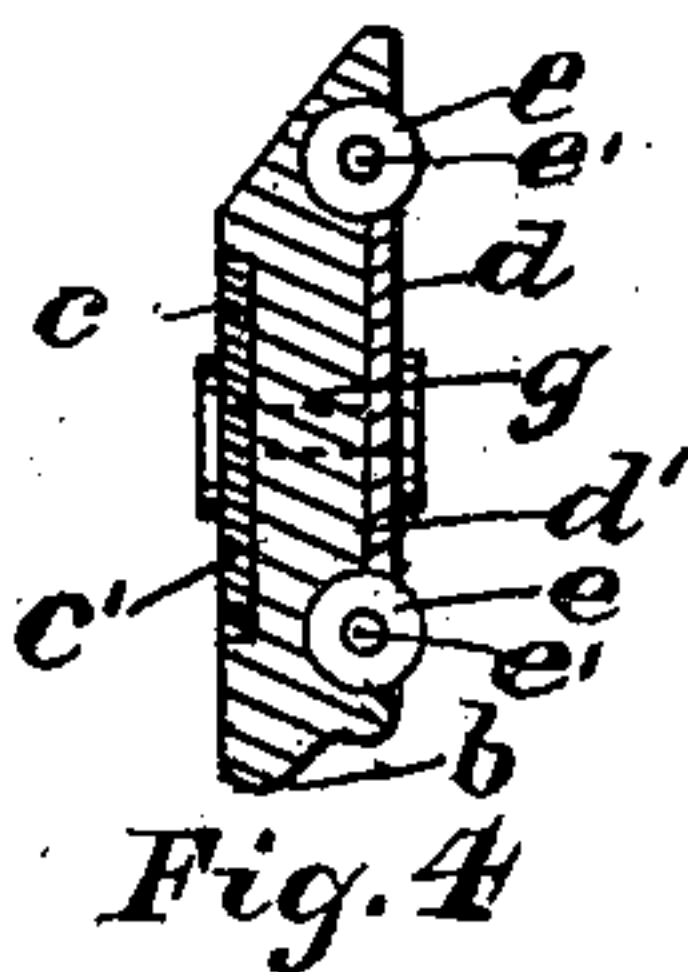


Fig. 4

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PARALLEL-RULER.

SPECIFICATION forming part of Letters Patent No. 677,777, dated July 2, 1901.

Application filed December 6, 1897. Serial No. 660,940. (No model.)

To all whom it may concern:

Be it known that I, HENRY GOLDMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Parallel-Rulers, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 shows a plan view of my said new parallel-ruler as seen on the top. Fig. 2 shows a plan view of the same as seen from the under side. Fig. 3 shows a vertical longitudinal section on plane xx , Fig. 1. Fig. 4 shows a transverse vertical section on plane yy , Fig. 1.

Like letters of reference denote like parts.

The object of my invention is to produce a ruler which shall serve as a parallel-ruler in both longitudinal and transverse directions and wherewith lines of indefinite length may be drawn, besides several other minor advantages, as hereinafter more fully described and shown.

I construct my said new device in substantially the following manner, namely: Make a ruler a with the usual beveled edge b , with a measuring-scale and a back edge b' of the usual construction. Near the ends of the ruler are transverse rollers f on bearings f' , which project as slightly as may be above the top surface thereof, and between said rollers is cut a channel c' , whose width is about equal to the length of said rollers and of a depth equal to one or more thicknesses of blotting-paper. On the under side of said ruler are two parallel rollers e on bearings e' , placed as near the front and back edges b and b' as may be and as near flush with the bottom of the ruler as may be, but so as to carry it free from the surface of the paper. The length of said rollers is nearly that of the ruler, and between said long rollers is a channel d' of the same length, or thereabout, as that of said rollers. Said channel is filled flush with the surface of the ruler with blotting-paper d and the top channel with blotting-paper c , of which the ends of both the blotters c and d are held by means of any suitable fastener, as here shown with disk washers having a central hole through which is passed a pin g , headed at each end, thus holding the blotters of both

sides of the ruler. The length of the ruler is short between the ends i , as it is intended for the pocket and to answer the purpose of larger and more accurate instruments, where such cannot be kept at hand, and for those who have but little of such work to do. There are small circumferential corrugations h on all of said rollers, the object of which is to make the rollers run more smoothly and truly than they would run if said cylindrical surface was made smooth. The blotters c d press slightly against the rollers with their edges, and thus tend to both keep the rollers clean and bright and at the same time wipe up any ink that may by accident get on the rollers, whereby the mischief of such blotting is cut off in the quickest time and with the least injurious result whenever such an accident occurs and is unobserved.

The use of the device is substantially as follows, namely: Parallel short lines of the length of the ruler or less are made with the edges b' or b and parallel lines at right angles to said former lines are made with the edges i at the ends of the ruler when running on the rollers f . Said lines of any length are also made by holding a pen or pencil fixedly against either the edge b' or b and running the ruler on its rollers f or by running the ruler on its long rollers e and holding a pen or pencil against one of the ends i , and parallel lines may be drawn by holding the drawing-pencil at the measured spaces of the scale on the edge b .

In Fig. 3 the blotter c' and rollers f are shown to extend to the plane xx of Fig. 1, which plane is supposed to be placed slightly beyond the rear roller e , in which case the plane xx cuts a section of the blotter c and of the ruler, and the ruler e is, as shown, farther in, as indicated by the broken lines.

What I claim is—

1. The combination with a parallel-edged ruler of a pair of parallel rollers near said edges, a channel between said rollers, an ink-absorbing device within said channel and provided with wiping edges which simultaneously engage both of said rollers.

2. The combination with a parallel-edged ruler of two sets of parallel rollers, the sets being on opposite sides of the ruler, the axes

of one set of rollers being transverse to the axes of the other set.

3. The combination with a parallel-edged ruler of two sets of parallel rollers, one set on
5 each opposite face of said ruler, the axes of one set of rollers arranged transversely to the axes of the other set of rollers, and channels with ink-absorbing devices between said rollers, which wipe said rollers, substantially as
10 described.

4. A ruler, comprising a body portion having two sets of rollers, one on each face thereof, the rollers on one face having axes transverse to the axes of the rollers on the other

face, the axes of both sets of rollers being substantially fixed. 15

5. A ruler, comprising a body portion having two sets of rollers, one on each face thereof, the rollers on one face having axes transverse to the axes of the rollers on the other
20 face, the axes of both sets of rollers being substantially fixed, each roller provided with a series of parallel grooves which divide the surface into a series of separated parts.

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Witnesses:

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