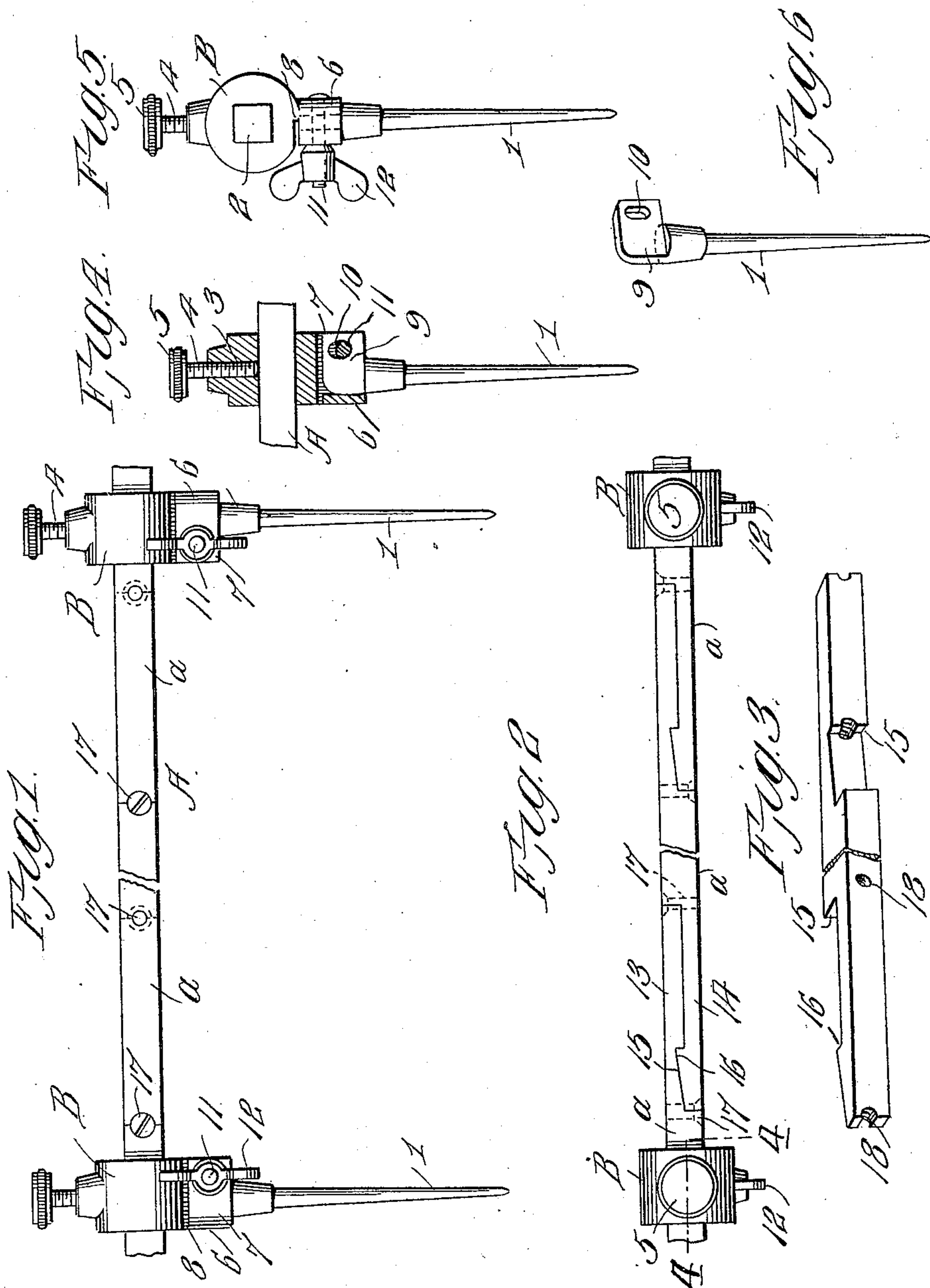


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FOLDING TRAMMEL.
APPLICATION FILED SEPT. 1, 1908.

916,912.

Patented Mar. 30, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

CLARENCE OLIVER CARRIER, OF CLEVELAND, OHIO.

FOLDING TRAMMEL.

No. 916,912.

Specification of Letters Patent.

Patented March 30, 1909.

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To all whom it may concern:

Be it known that I, CLARENCE OLIVER CARRIER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Folding Trammels, of which the following is a specification.

This invention relates to trammels, and the invention has for its principal object to provide an instrument of this character free from the common objections which mechanics find with devices heretofore employed.

Another object of the invention is the provision of a trammel in which the points are hingedly connected to the slides so that the points can be folded back against the beam of the instrument, the beam itself being readily extended by adding sections thereto according to the size of the work to be made out.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter, and particularly pointed out in the claims appended hereto.

In the accompanying drawing which illustrates one of the embodiments of the invention, Figure 1 is a side view of the instrument with portions of the beam broken away. Fig. 2 is a plan view thereof. Fig. 3 is a perspective view of one of the sections of the beam, an intermediate portion thereof being broken away. Fig. 4 is a section on line 4—4 of Fig. 2. Fig. 5 is an end view of the instrument. Fig. 6 is a perspective view of one of the points or legs.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawing A designates the bottom of the instrument and B the slides on which the points are mounted. Each slide consists of a body having a square or other non-circular opening 2 extending entirely through the same for receiving a beam which is of corresponding cross section as the opening. In each head is a threaded aperture 3 for receiving a binding screw 4 that is arranged to engage the beam and thereby rigidly hold the slide in place, the outer end of the screw being provided with a milled head 5 for convenience in manipulating the screw. The points are hingedly connected to the

slide so that they may be folded against the beam when not in use. Each slide has a depending projection 6 which is provided with a slot disposed parallel with the beam and open at one side so as to form parallel jaws 7 one of which is rendered resilient by providing a kerf or slit 8 horizontally in the lug at the base thereof; and on the point is a flat tongue 9 that extends between the jaws and is provided with a lateral extension that has an opening 10 through which passes a clamping screw 11 that is fastened at one end in the fixed jaw and extends freely through the spring jaw, the projecting end of the screw being provided with a winged clamping nut 12 whereby the jaws can be clamped to the tongue of the pin or leg 1. By loosening the screw the leg or pin can be freely turned on the screw as a pivot and thus occupy a position close to the beam.

The beam is preferably of the same cross section from one end to the other so that the slides can be slipped on or off the ends thereof and adjusted to any point along the length of the beam. The beam is preferably composed of sections α which are jointed together in such a manner as to permit the beam to be lengthened or shortened quickly and conveniently. For this purpose the meeting ends of the sections are halved so as to overlap each other and these overlapping portions 13 and 14 at each joint are provided respectively with a notch 15 and projection 16 whereby the sections are secured together against longitudinal movement. The meeting ends of the sections are secured in place by countersunk screws 17 that are arranged in threaded openings 18 each formed partly in one section and partly in the other. The screws are reversely arranged at the ends of each joint and it is merely necessary to loosen the screws enough to permit the sections to be supported laterally to disengage the projection 16 from the recess 15 whereupon the sections can be disconnected by relative longitudinal movement. It will thus be seen that the sections of the beam can be readily connected or disconnected for varying the length of the beam as occasion requires.

From the foregoing description, taken in connection with the accompanying drawing the advantages of the construction, and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have

described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood
5 that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what
10 is claimed as new is:—

1. A trammel comprising a beam, a pair of slides thereon, a pair of jaws on each slide, a connecting wall between the jaws, a point having a flat tongue disposed between
15 the jaws, and adapted to bear on the said wall when the point is in open position, a clamping screw for drawing the jaws together to secure the point fixedly in position and forming a pivot on which the point
20 is adapted to fold and a clamping device for securing the slides to the beam.

2. In an instrument of the class described, the combination of a beam of uniform cross section throughout its length and composed of detachably connected parts, slides mount- 25 ed on the beam, means for clamping the slides in fixed position, clamping jaws formed on the slides, scribing devices, heads on the devices disposed between the clamping jaws, a jam bolt passing through the 30 jaws of each slide, said heads having openings through which the bolts freely extend, and abutments on the slides against which the heads bear when the scribing devices are in operative position at right angles to the 35 length of the beam.

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

CLARENCE OLIVER CARRIER.

Witnesses:

GEORGE T. SAUNDERS,
J. H. ORGILL.