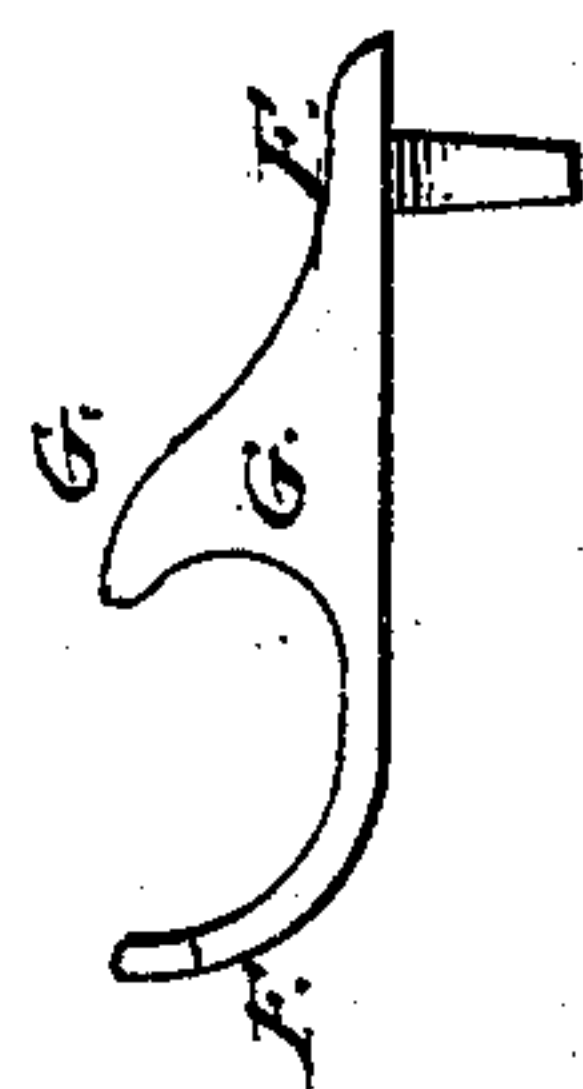
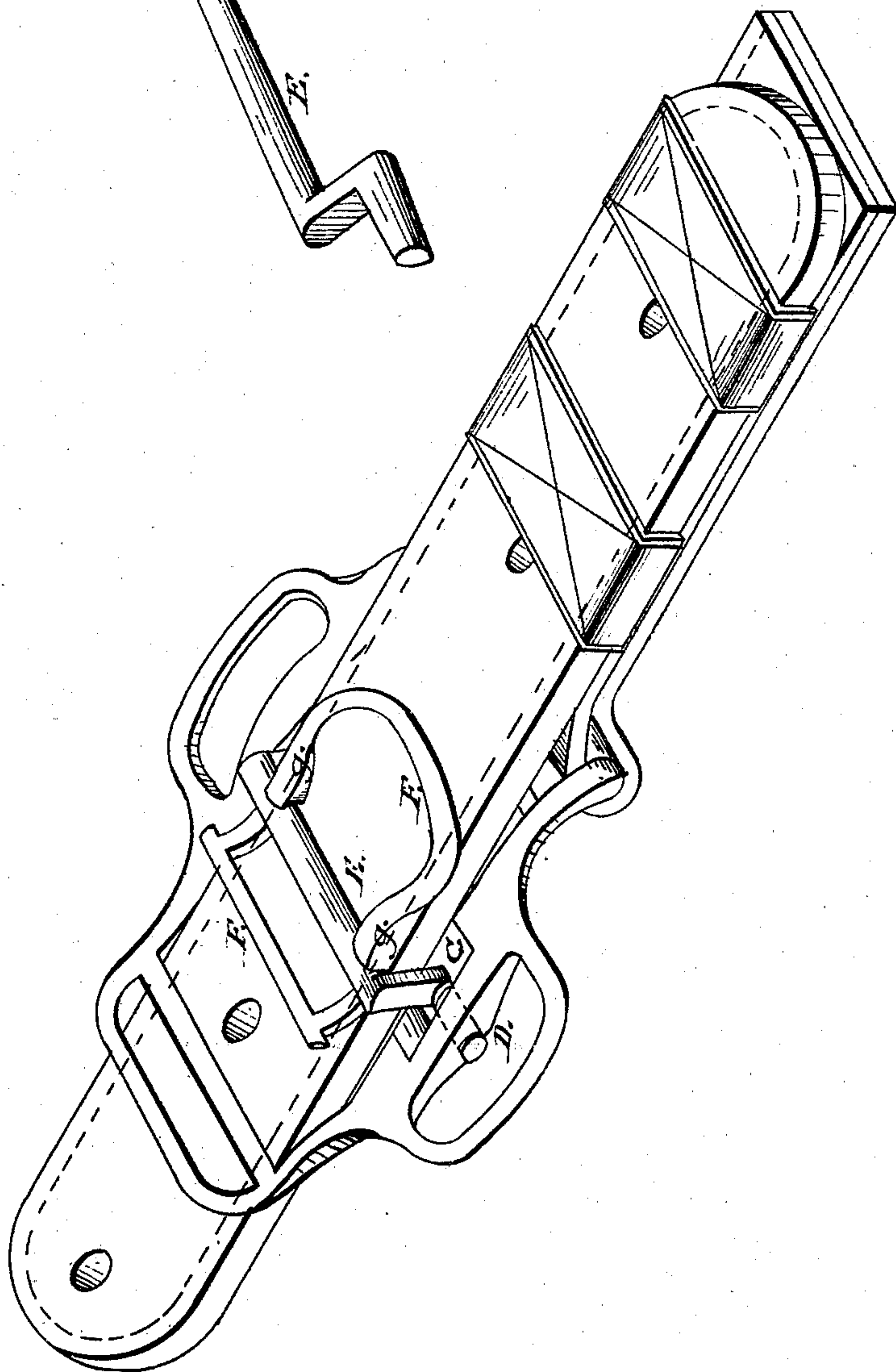
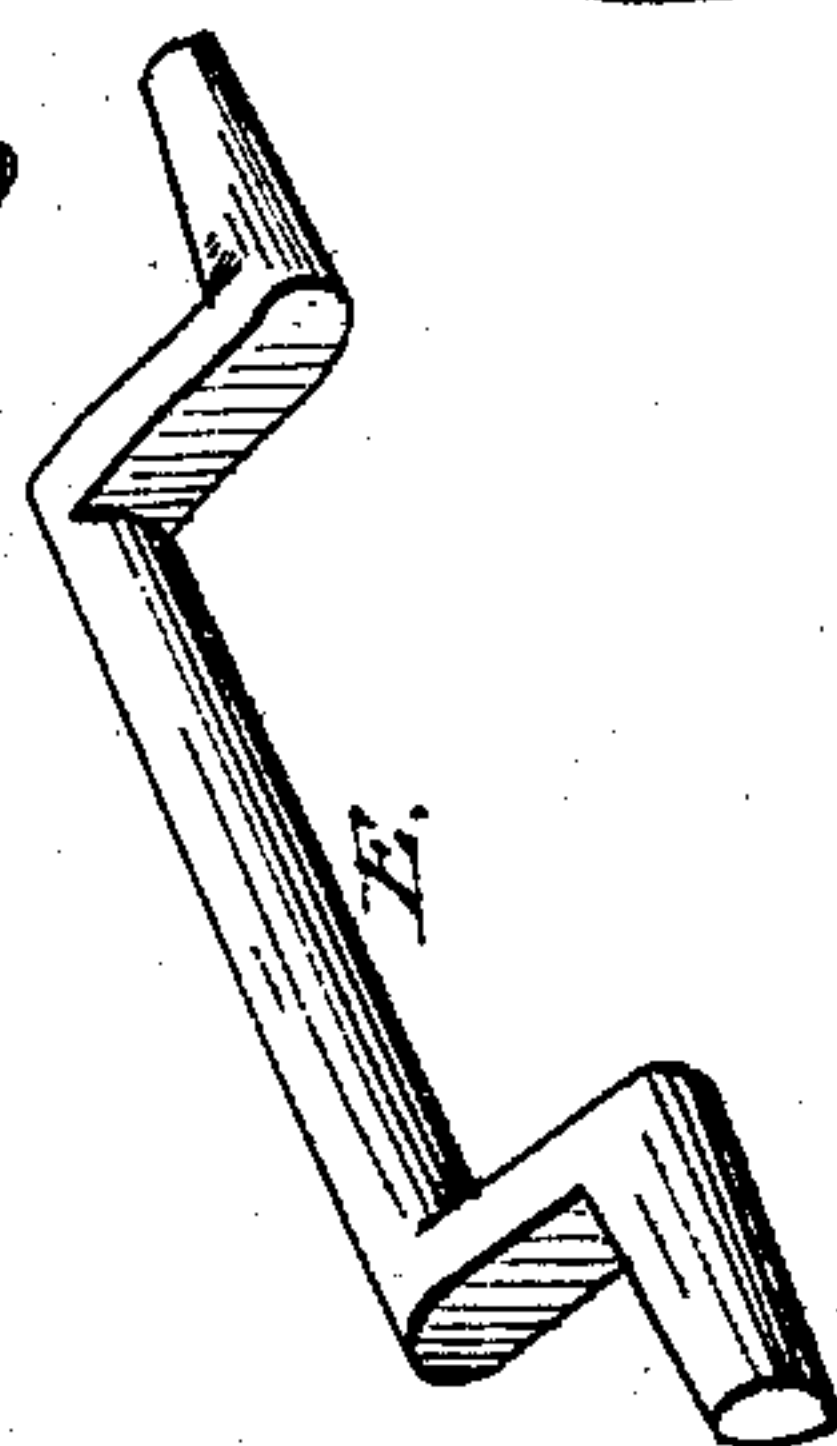
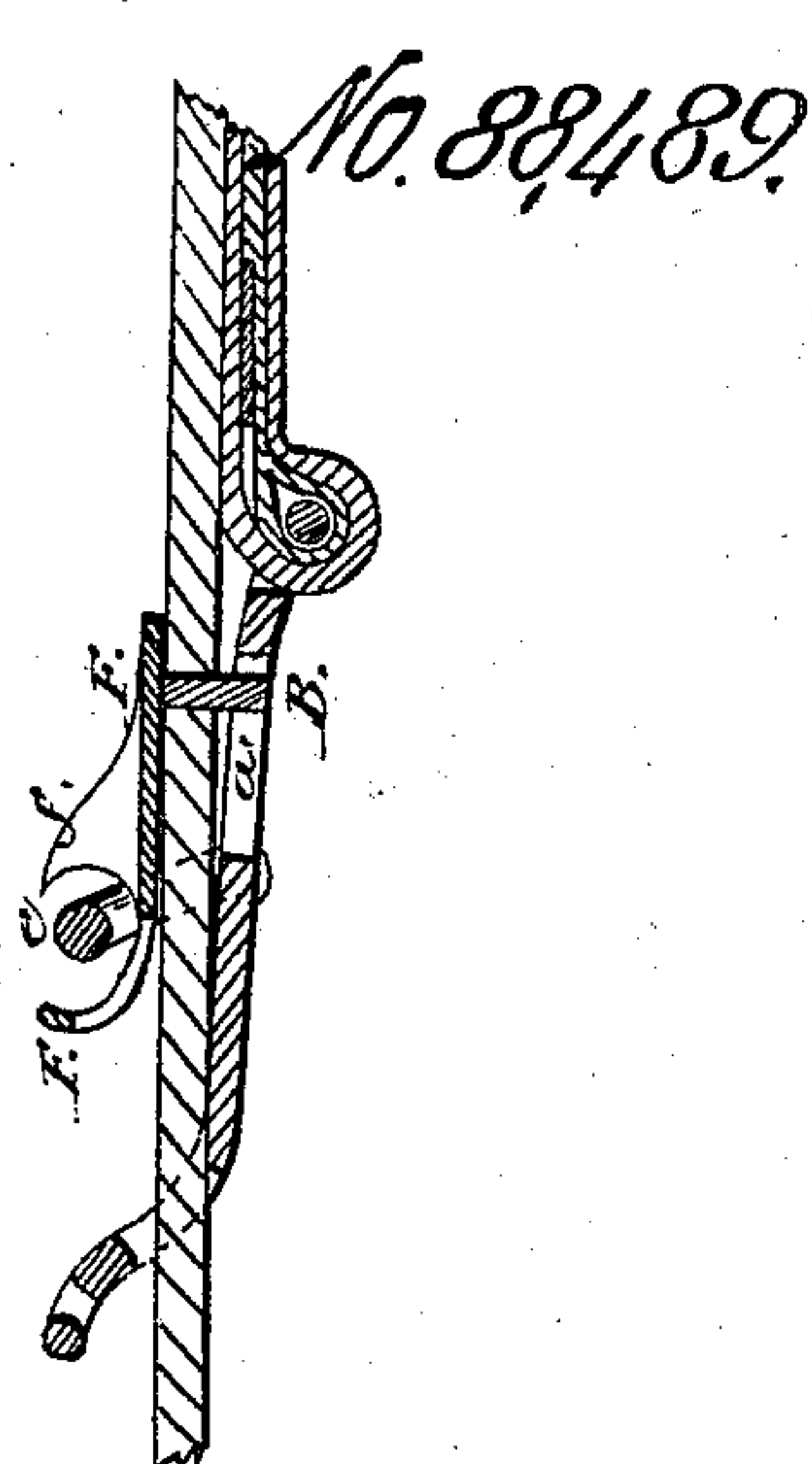


E. M. Kinne,

Buckle.

Patented Mar. 30. 1869.



WITNESSES:

G. Smith
O. O. Brown

INVENTOR:

Erastus M. Kinne



ERASTUS M. KINNE, OF CUBA, NEW YORK.

Letters Patent No. 88,489, dated March 30, 1869.

IMPROVED TRACE-BUCKLE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, ERASTUS M. KINNE, of the town of Cuba, county of Allegany, and State of New York, have invented a new and useful Trace-Buckle, for fastening the tug in the harness, and facilitating the taking up and letting out of the same; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in making an aperture, (marked A, in said drawings,) through the platform lying between the horizontal bars of the frame of the buckle, which aperture is to be of any width, from one inch to one-fourth of an inch, running the whole width of the platform, the side of the aperture nearest the hames to be square, with the exception of a small oval cavity, (marked B, in said drawings,) in the centre, about one-fourth of an inch deep, in which is to be admitted the tongue of the buckle, after the same has passed through the tug, the opposite side to be bevelled, as occasion may require; each horizontal bar to contain a chamber, (marked C, in said drawings,) from three-fourths to one-fourth of an inch in length, and about one-fourth of an inch wide, of the same depth as the bar, with end sides slanting toward the top and back of the buckle, at an angle of about forty-five degrees; the base of each chamber nearest the hames-part, or front of the buckle, to be on a line with the lower part of the straight edge of the aperture, aforesaid. Said chamber, also, to extend about one-fourth of an inch back from the bevelled edge, or side of the same. Each bar, also, to contain, on the lower side, a box, (marked D, in said drawings,) of sufficient depth and capacity to allow the free working of a pivot,

from one-eighth to one-fourth of an inch in diameter. As the buckle may require said boxes to be at right angles with the chambers above mentioned, and exactly opposite each other, said boxes to begin on a straight line, extending from the rear base of the chambers aforesaid, and run, thence, toward the front of the buckle; in each of which boxes is to be a pivot, from one-eighth to one-fourth of an inch in diameter, which pivots are to be fastened to cranks, about one-half an inch long, which cranks are to pass through the chambers aforesaid, and be united by a straight bar, forming, in all, a "shoulder-brace bar," (marked E, in said drawings,) underneath which bar, so uniting said cranks, and between that and the platform aforesaid, is to pass a base, (marked F, in said drawings,) for two shoulder-braces, (marked G, in said drawings,) which are to be fastened to the same, and against which the "shoulder-brace bar" aforesaid is to rest; which "shoulder-braces" are to be either square or slightly bevelled, on the side toward the bar, to keep the same from wedging as the trace tightens; beneath which base, (on the lower side of which is to be the tongue of the buckle,) and between that and the platform, is to pass the tug.

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

The combination of the aperture A, the chambers C, the boxes D, the shoulder-brace bar E, with the shoulder-braces G, as above described, for the purpose specified.

ERASTUS M. KINNE.

Witnesses:

E. O. BROWN,
GEO. G. RUSSELL.