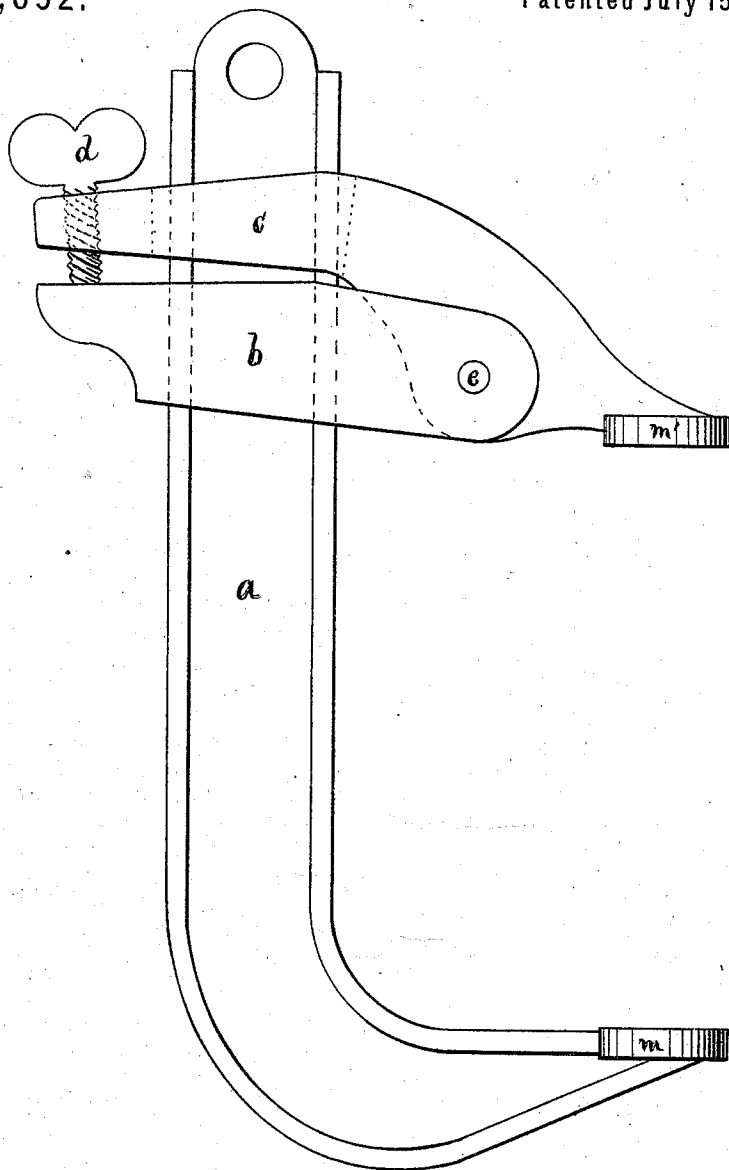


J. E. SINCLAIR.
Clamps.

No. 140,852.

Patented July 15, 1873.



Witnesses

Marietta S. Sinclair
Mary Hale

Inventor

John E. Sinclair

UNITED STATES PATENT OFFICE.

JOHN E. SINCLAIR, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN CLAMPS.

Specification forming part of Letters Patent No. **140,852**, dated July 15, 1873; application filed November 11, 1872.

To all whom it may concern:

Be it known that I, JOHN E. SINCLAIR, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain Improvements in Clamps, of which the following is a specification:

My invention relates to a combination of the parts *a*, *b*, and *c* constituting an adjustable clamp.

a represents the bar of the clamp, upon which the piece *b* moves freely when any force is applied to it directly. The piece *c* is connected to *b* by a joint, *e*, about which it may have an angular motion.

The clamp is used as follows, with the screw *d* turned back: The object to be held is placed

against the face *m*, when the pieces *b* and *c* are, together, pushed along the bar *a* until *m'* is in contact with the other side. When the screw *d* is turned pressure is produced upon the object through the lever *c*, and by reaction the piece *b* is immovably fixed upon the bar *a* through the influence of what is known as jamming friction.

What I claim as my invention is—

The combination of the piece *a*, the movable piece *b*, the lever *c*, and the screw *d*, or their equivalents, by means of which the results described may be produced.

Witnesses: JOHN E. SINCLAIR.

E. P. BARBER,
JOS. S. ROGERS.