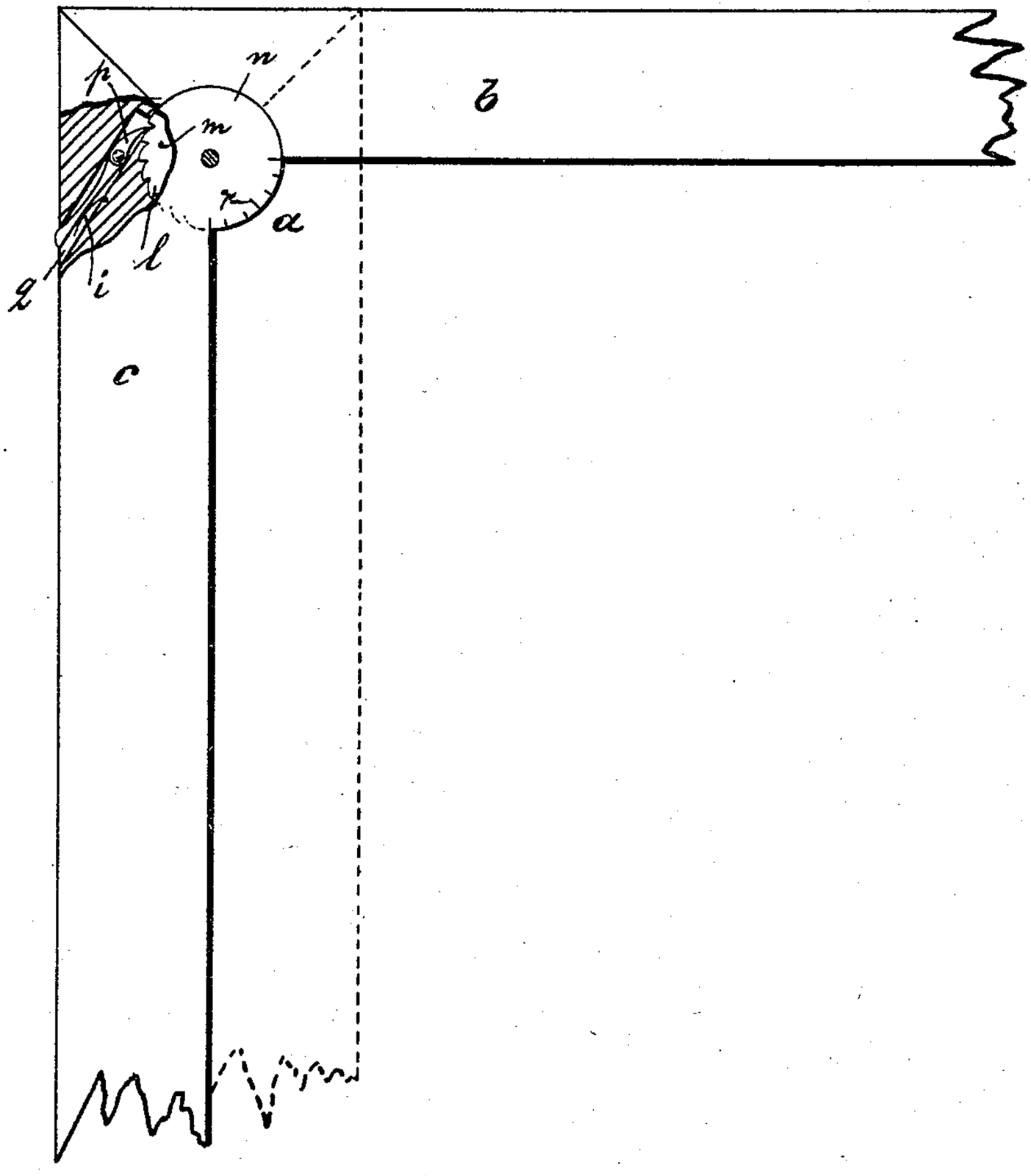
(No Model.)

E. DE CAMP.

FOLDING SQUARE.

No. 488,544. Patented Dec. 27, 1892.



WITNESSES:

Wm. D. Bell.

D. Robertson.

INVENTOR:

Eliphalet De Camp

BY

Gartner & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

ELIPHALET DE CAMP, OF NEWARK, NEW JERSEY.

FOLDING SQUARE.

SPECIFICATION forming part of Letters Patent No. 488,544, dated December 27, 1892.

Application filed May 17, 1892. Serial No. 433,293. (No model.)

To all whom it may concern:

Be it known that I, ELIPHALET DE CAMP, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Squares; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in squares and it consists in certain novel features which will be hereinafter described and claimed.

In the annexed drawing, I have shown a plan view of a portion of a square provided with my improvements, partly broken away.

Referring to the drawing by letter, *a* designates a square consisting of the arms *b c* which are connected by a hinge joint, as clearly shown. The said hinge joint consists of the lug or disk *m* projecting from, and fixed to the arm *b* and fitting between and pivoted to the similar lugs or disks *n* projecting from the arm *c*. The lug *m* is provided with a series of ratchet teeth *l* which are engaged by a pawl *p* pivoted within an inclined slot or recess *q* in the arm *c* and held normally in engagement with the said ratchet teeth by a spring *i* secured in the side of the recess and bearing against the pawl near the outer end of the same. The end of the pawl projects slightly beyond the side of the arm *c* so that it may be released by a pressure of the thumb or finger, but not so far that it is liable to be accidentally released by striking against a table or other object. The lugs *n* are provided with a series of graduations *r* so that the arms may be adjusted to the exact angle desired.

It will be readily seen from the foregoing description that I have provided a very simple square the arms of which can be easily adjusted to any desired angle and securely held in their adjusted position. It will be observed that as the arms are folded the ratchet teeth slip readily under the pawl but any reverse movement of the arms is resisted by the pawl so that spreading of the arms is positively prevented. It will also be observed that the operating parts are inclosed so as to be protected from injury and the liability of breakage is reduced to a minimum. The arms of the square are adjusted to the desired angle by being simply folded together and will be held in their adjusted position until the pawl is released by the pressure of the thumb or finger.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

The combination of the arm *c* having the recess *q* and the lugs *n*, the arm *b* having the lug *m* pivoted between the lugs *n* and having ratchet teeth on its edge, a pawl pivoted within the recess *q* and engaging the ratchet teeth, and having its outer end projecting slightly beyond the side of the arm *c* and a spring secured in said recess and bearing against the pawl to hold it normally in engagement with the ratchet teeth.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of May, 1892.

ELIPHALET DE CAMP.

Witnesses:
ALFRED GARTNER,
WM. D. BELL.