(No Model.)

A. E. SELTZER.

FOLDING SQUARE.

No. 342,849. Patented June 1, 1886.

FIG. 1.

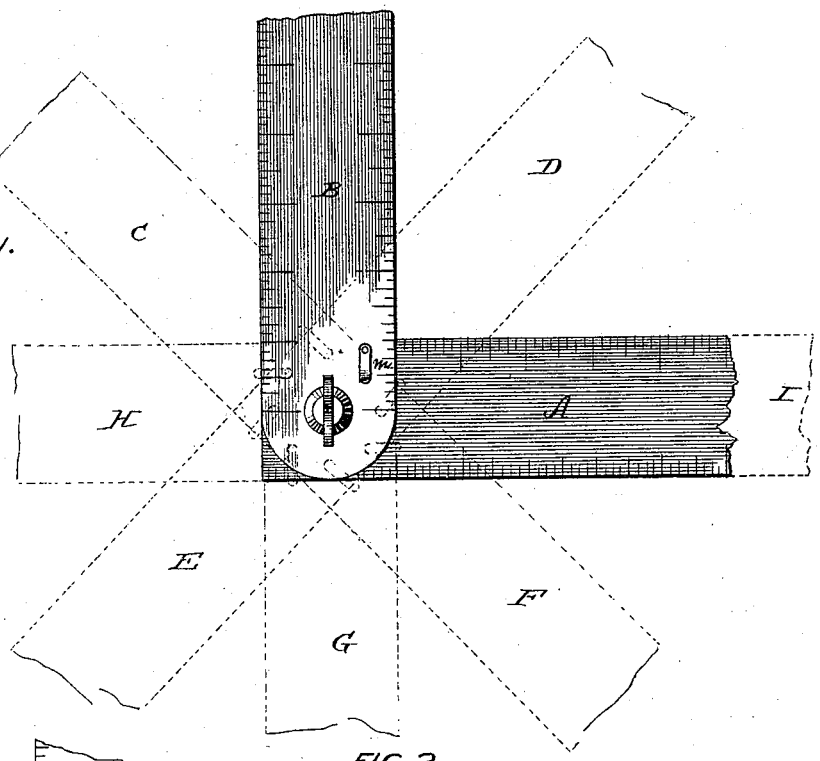


FIG. 2.

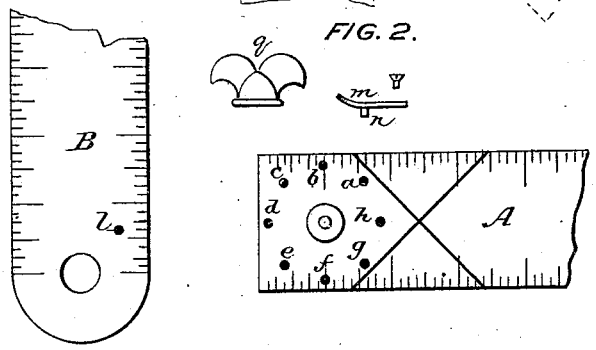
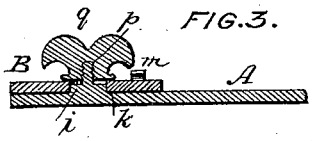


FIG. 3.



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UNITED STATES PATENT OFFICE.

ABRAM E. SELTZER, OF LEBANON, PENNSYLVANIA.

FOLDING SQUARE.

SPECIFICATION forming part of Letters Patent No. 342,849, dated June 1, 1886.

Application filed January 25, 1886. Serial No. 189,597. (No model.)

To all whom it may concern:

Be it known that I, ABRAM E. SELTZER, a citizen of the United States, residing at Lebanon, in the county of Lebanon and State of Pennsylvania, have invented certain new and useful Improvements in Folding 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.

The invention relates to folding squares, and has for its object the construction of a convenient implement for the use of carpenters and other workmen, which can be readily converted into a right or left hand square or bevel, or extended to form a long rule, and changed from one position to another with facility and dispatch.

The invention will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which form a part of this specification, Figure 1 represents a side view; Fig. 2, a detail, and Fig. 3 a sectional view.

Reference being had to the drawings, A represents the long arm or blade of an ordinary carpenter's graduated square, which is provided with a series of holes, *a b c d e f g h*, eight in number, formed in a circle around the stud *i*.

B is the short arm or blade, also graduated, provided with a central aperture, *k*, which fits over the stud *i*, and a hole, *l*, which registers with the holes formed around the stud in the other arm or blade.

Upon the blade B is secured a spring, *m*, which carries a pin, *n*, which projects through the hole *l* into the registering holes in the blade A, and automatically locks the blades when the hole *l* is brought in line with either of the holes in the said blade.

The stud *i* is provided with a screw-threaded projection, *p*, upon which is screwed a thumb-nut, *q*, for securing the two blades in any desired predetermined position.

By referrring to Fig. 1 it will be observed that when the hole *l* in the blade B registers with the hole *a* in the blade A a right-hand square is formed.

To change the position of the blade B the nut *q* is slackened, the spring *m* raised, and the pin *n* withdrawn from the hole *a*, when said blade may be pushed into either position shown in dotted lines, in which C represents an angle of forty-five degrees up; D, the same angle down on the right side; E and F, corresponding reverse positions; G, a left-hand square; H, an extension of the arm or blade A, which forms a convenient rule for measuring purposes in many instances in which the ordinary two-foot rule is too short, and two rules must be joined or a rod used to span a space desired to be measured, or it will form a straight-edge for ruling purposes. I shows the blade B folded upon the blade A, for the purpose of conveniently carrying it in the hand, a tool-box, or an ordinary carpenter's chest. When set in either position, the nut *q* is tightened, and the parts A B firmly held together.

Heretofore bevels and draftsmen's squares have been made adjustable by providing a series of holes in one of the parts and a corresponding number of pins to register with each of the holes in the opposite part. By this construction it is necessary to separate the parts by lifting the blade from its stock and the pins out of the holes, and then change the angle and again insert all of the pins and secure the two parts by means of a screw.

An ordinary hinged measuring-rule has had a series of holes formed in the joint and a pin provided to lock them. In this construction the angle can be formed on one side only.

By my invention the short blade of the square rests upon the long blade, and can be adjusted to either side to form a right or left hand instrument, and the blades firmly secured against displacement.

Having thus fully described my invention, what I claim is—

1. A reversible folding square consisting of two overlapping blades, one of which is provided with a projecting stud and a series of holes arranged in a circle around said stud, and the other blade provided with an aperture corresponding with the stud and a hole arranged to register with either of the holes in the first blade, in combination with a spring locking device, substantially as described.

2. A reversible folding square consisting of two overlapping blades, one of which is provided with a projecting stud and a series of holes arranged in a circle around said stud, and the other blade provided with an aperture corresponding with the stud and a hole arranged to register with either of the holes in the first blade, in combination with a spring locking device and a clamping-nut for securing the blades in any locked position, substantially as described.

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

ABRAM E. SELTZER.

Witnesses:
JOHN H. SPAYD,
S. H. BENTZ.