(No Model.)

J. W. ROGERS & H. CHESHER.

FOLDING SQUARE.

No. 551,839. Patented Dec. 24, 1895.

Fig. 1.

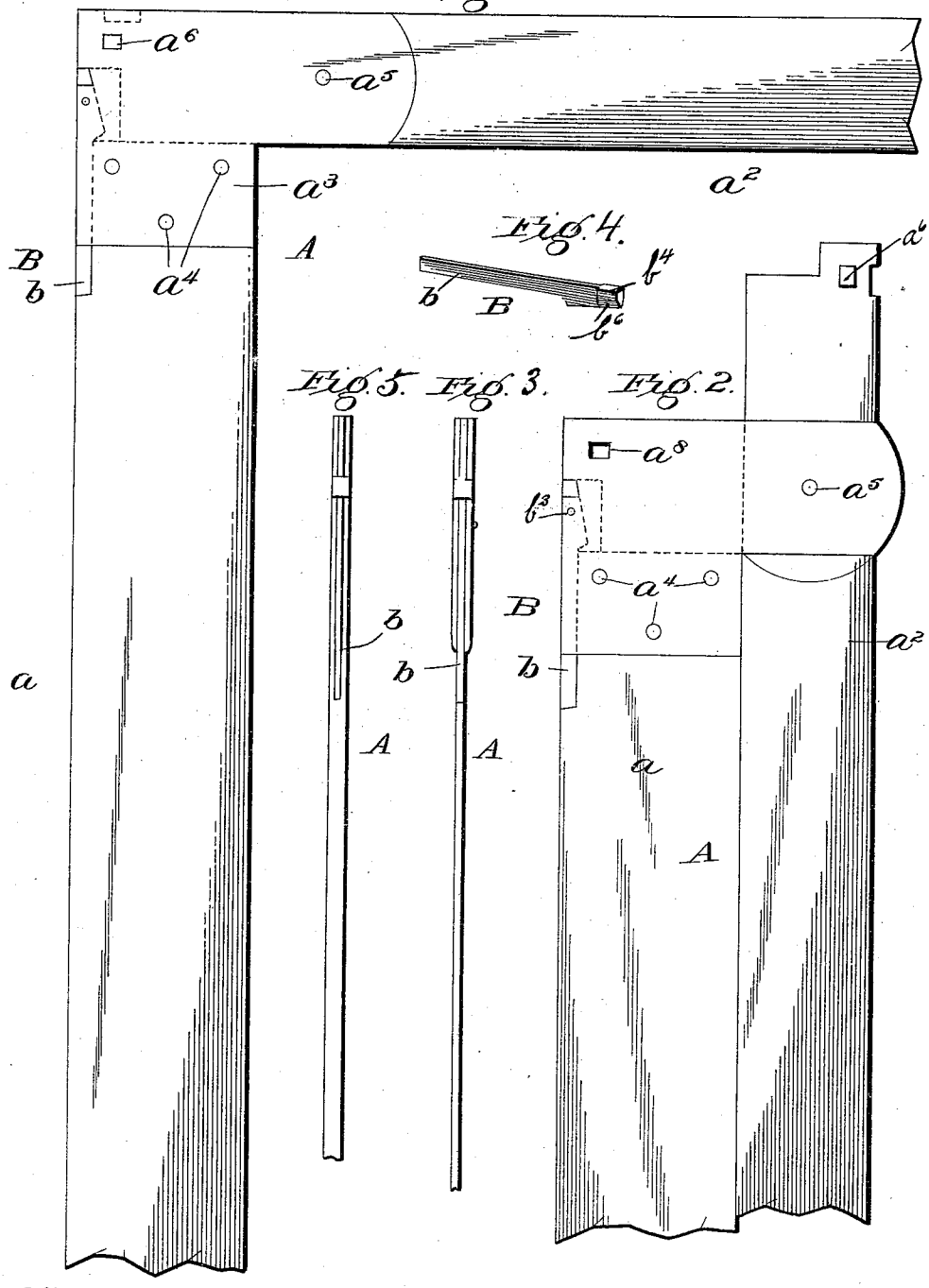

Fig. 4.

Fig. 5. Fig. 3. Fig. 2.

Witnesses
Edw. B. Barron
J. M. Franklin

Inventors:
John W. Rogers
Harry Chesher
By their Attorneys
Pumphrey Johnson & Hincken

UNITED STATES PATENT OFFICE.

JOHN WILLIAM ROGERS AND HARRY CHESHER, OF PHILADELPHIA, PENNSYLVANIA.

FOLDING SQUARE.

SPECIFICATION forming part of Letters Patent No. 551,839, dated December 24, 1895.

Application filed March 13, 1895. Serial No. 541,636. (No model.)

To all whom it may concern:

Be it known that we, JOHN WILLIAM ROGERS and HARRY CHESHER, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Folding Squares; and we 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.

Heretofore the annoyance and inconvenience attending the use of large metal squares, such as are now commonly employed by carpenters, masons, and mechanics generally, arises as a result of the awkward shape of the instrument or tool, which is particularly noticeable when in a tool-box, it being impossible to pack it so as to avoid the projecting blade or arm thereof. It is the object of the invention to obviate this and other objections, and with but slight, if any, increase in cost, by a slight alteration in the construction of the square, whereby it will be rendered capable of being compactly folded to occupy a comparatively small space and at the same time will be adapted to lock automatically when extended, and, further, to produce a simple and inexpensive key by which the release of the members will be readily effected.

With these objects in view the invention consists of certain novel features and combinations of parts, to be hereinafter described and claimed.

In the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in the several views, Figure 1 is a view in elevation of one embodiment of the invention, showing the square locked in an extended position. Fig. 2 is a similar view showing the square folded. Fig. 3 is an end view. Fig. 4 is a view in detail of the releasing-key. Fig. 5 is an end view of a modification.

In the drawings, A represents the square, the arms or blades a a^2 of which are joined by two right-angled plates a^3 arranged one upon each side thereof. The long arm of the square is rigidly secured between these plates in the ordinary manner by rivets a^4, or it may, if desired, be formed integral therewith. The short arm is movably held between projecting portions of the plates to turn about a pivot-pin a^5. At the upper end near the outer edge of this last-mentioned arm studs a^6 project in opposite directions from each face thereof and are beveled so as to pass between the plates and engage and become locked in openings a^8 formed therein as the arm is extended or swung around in the normal position. To disengage the arm thus locked, it is necessary to spring or force the plates apart sufficiently to permit the lugs to clear the openings as the arm is swung around, and to effect this a releasing attachment is employed.

B represents this device, which in the present embodiment consists in a lever b, seated in a recess of the fixed blade to have limited movement about a pivot-pin b^3. The inner extremity of this lever is enlarged, as at b^4, the enlargement being normally held in a notch of the angle-plates, and has a beveled portion b^6 which projects inward between the plates. The outer extremity of the lever extends beyond the plates and lies in a recess or notch of the fixed blade in position to be readily grasped between the finger and thumb, and upon being lifted the inner wedge-shaped portion enters the space between the plates, forcing them apart, and thereby releases the blade, which may be swung around to the position shown in Fig. 2.

As shown in Figs. 1, 2 and 3, the plates are flush with or form part of the blades. If desired they may be arranged as illustrated in Fig. 4, in which they are secured upon opposite sides.

Should it be found desirable to dispense with the releasing device the movable blade would be notched, as is indicated in Fig. 1, to admit the end of a screwdriver or key.

The many advantages of the invention will be apparent from the foregoing description.

We claim—

1. A square having a self locking blade pivoted between projecting lugs of the square proper and a releasing device provided with a wedge-shaped extremity by which the lugs are adapted to be sprung apart.

2. A folding square, comprising two blades, held respectively fixed and movable between

duplicate angular plates, and a locking device for the movable arm, consisting of integral beveled studs adapted to engage openings in the plates, the movable arm being notched to receive a key by which the arm is released, as specified.

In testimony whereof we have signed the specification in presence of two subscribing witnesses.

JOHN WILLIAM ROGERS.
HARRY CHESHER.

Witnesses:
H. B. LUFFBERRY,
ROBT. A. TAYLOR.