No. 628,853. Patented July 11, 1899.

J. B. ROBICHAN.

STEEL SQUARE.

(Application filed Dec. 12, 1896. Renewed May 8, 1899.)

(No Model.)

FIG. 1.

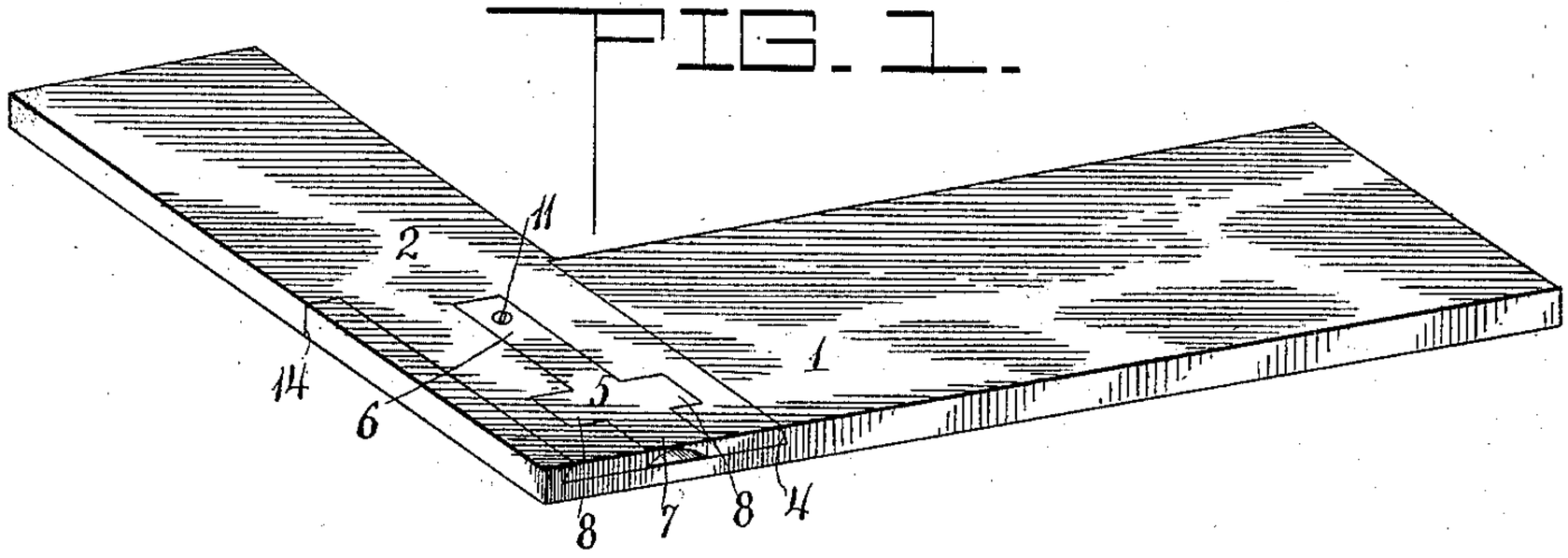


FIG. 2.

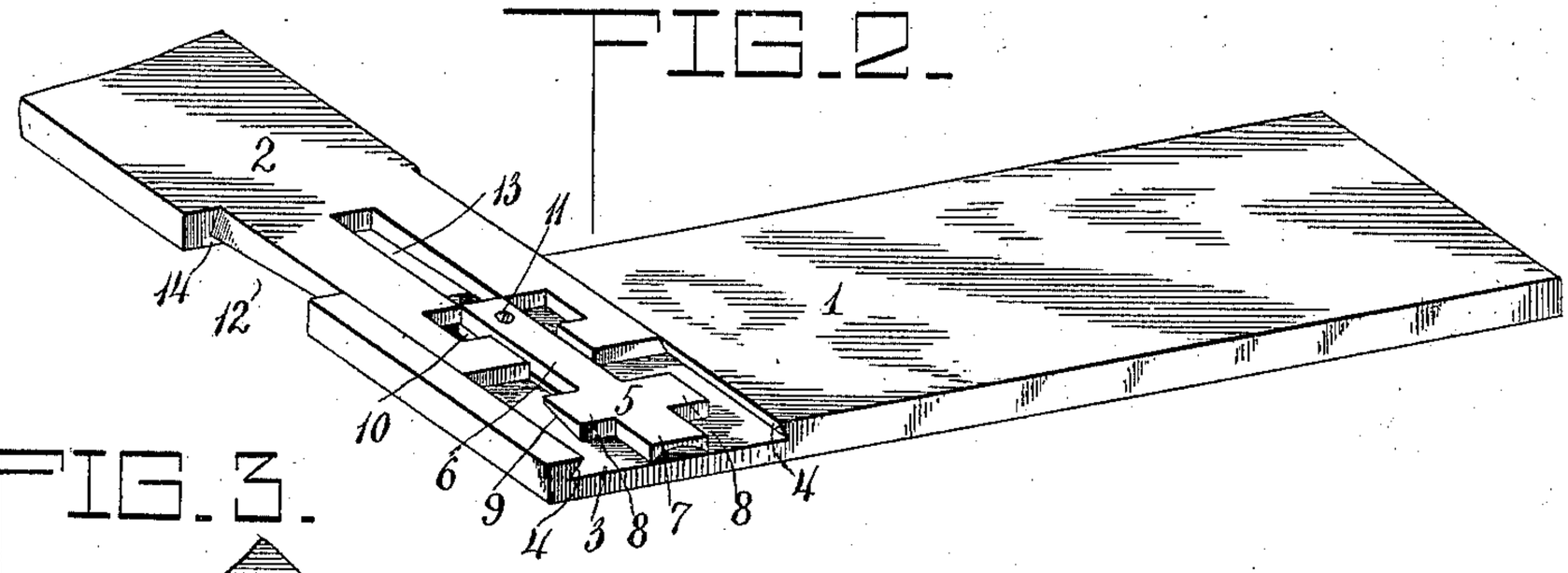


FIG. 3.

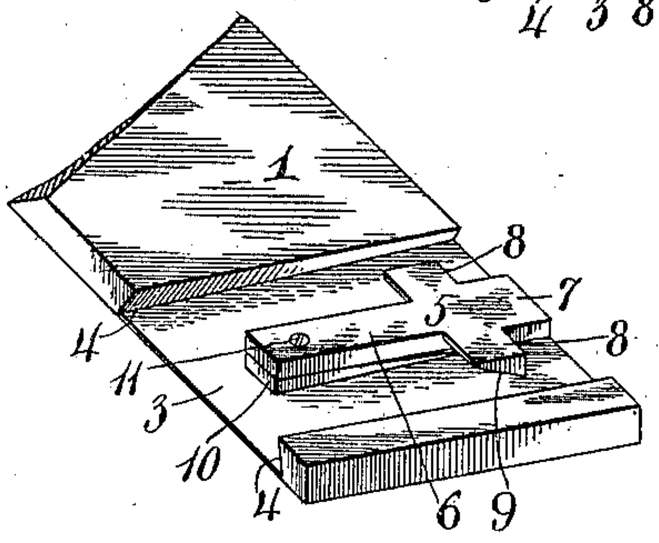
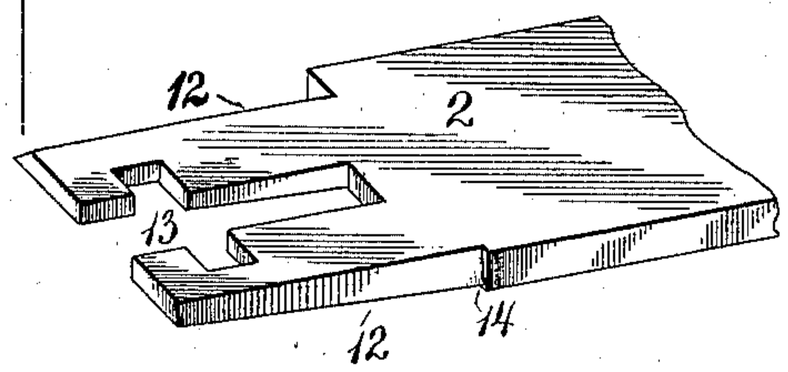


FIG. 4.



WITNESSES

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STEEL SQUARE.

SPECIFICATION forming part of Letters Patent No. 628,853, dated July 11, 1899.

Application filed December 12, 1896. Renewed May 8, 1899. Serial No. 715,979. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH B. ROBICHAN, a subject of the Queen of Great Britain, residing at Beverly, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Steel 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.

My invention relates to improvements in folding squares, and has for its object the production of a square the sides of which can be connected or disconnected by a simple and efficient locking device permanently carried by the square, and consequently obviating the objection to loose parts usually employed in effecting such connections and which are liable to be broken or lost.

To the accomplishment of this and other objects my invention consists in providing one side or member of the square with a transverse groove and a spring-latch and in providing the other side or member of the square, which is designed to engage the groove, with an aperture designed to receive the spring-latch.

Referring to the drawings, Figure 1 is a perspective view of my square, showing the sides connected. Fig. 2 is a similar view showing the members in the act of being connected, and Figs. 3 and 4 are detailed views of the locking ends of the sides or members of the squares.

Referring to the numerals on the drawings, 1 indicates what I will call the "latch member" of my square, and 2 the "locking member" thereof.

3 indicates a transverse recess extending across the latch member adjacent to one extremity and provided with inclined sides 4.

5 indicates a latch stamped from spring metal and composed of a stem 6, an enlarged end 7, extending flush with one edge of the latch member, and lateral projections 8, adjacent to the enlarged end 7 and provided with inclined rear edges 9. The upper surface of the latch is preferably flush with the surface of the latch member and is therefore mounted upon a base 10, for the reason that the recess 3 is deeper than the thickness of the latch, which, as stated, is preferably made of flat spring metal. Any suitable means may be employed for securing the extremity of the latch-stem upon the base 10, a countersunk screw 11 being a preferable device. The lock member 2 is provided with a recess 12, corresponding in length to the width of the latch member and of a sufficient depth to cause the end of the member to fit snugly within the transverse recess 3, the end of the locking member being provided with inclined sides corresponding to the inclined edges 9 of the transverse recess.

13 indicates what I will call the "latch-recess," corresponding in shape and dimension with the latch 5 and designed when the parts are locked to receive the latch, as illustrated in Fig. 1 of the drawings. It will be seen that when the comparatively narrow end of the locking member is slid into the transverse recess 3 the stem of the latch will enter the latch-recess. Continued movement of the locking member will cause its extremity to impinge against the inclined edges of the lateral projections 8, causing the latch to be sprung upward, as shown in Fig. 2 of the drawings. The locking member can now be forced through the recess 3 until the bottom 14 of the recess 12 abuts against the side of the latch member, at which time the transverse projections of the latch will come opposite the transverse portions of the latch-recess and the latch will spring into place, the surfaces of the two members and of the latch being flush.

When it is desired to unlock the members, it is simply necessary to spring back the latch and withdraw the locking member, the locking of the parts being accomplished in the manner described.

It will thus be seen that I have produced a folding square which can be unfolded and packed without necessity for the employment of loose parts and the members of which may be securely locked by an automatic latch which requires no attention from the operator.

I do not desire to limit myself to the details of construction herein shown and described,

but reserve to myself the right to change, modify, and vary them at will within the scope of my invention.

What I claim is—

1. A square comprising two members, said members provided respectively with a recess and tongue adapted to interlock and prevent vertical disengagement, and a latch secured at one end within the recess member, and formed with lateral projections having their under sides inclined, the tongue member formed with a recess corresponding in shape to the latch, whereby when the tongue member is moved within the recess member, the same engages the inclined under surface of the lateral projections of the latch and raises the same until it registers with the latch-recess, when it will drop thereinto and prevent the lateral disengagement of the parts, substantially as described.

2. A square consisting of two members, one of said members transversely recessed, the bottom wall of said recess inclined, a spring-latch consisting of a stem portion secured at one end within the recess and extending longitudinally the same, lateral projections or wings formed on the stem adjacent the free end thereof, the other member formed with a latch-recess extending longitudinally the same, and of substantially the same contour as the latch, the under side of said member being inclined oppositely to the bottom wall of the recess, the two members adapted to co-operate in the manner and for the purpose set forth.

3. A device of the character described, comprising a latch member having a transverse recess, a projection raised from the same, a latch secured at one end upon the projection and provided with lateral projections or wings adjacent its opposite end, the under surface of the latch and the upper surface of the projection being oppositely inclined, and a locking member provided with a latch-recess adapted to receive the latch, whereby the two members are locked together, substantially as set forth.

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

JOSEPH B. ROBICHAN.

Witnesses:
DENNIS W. QUILL,
MARY E. MOONEY.