

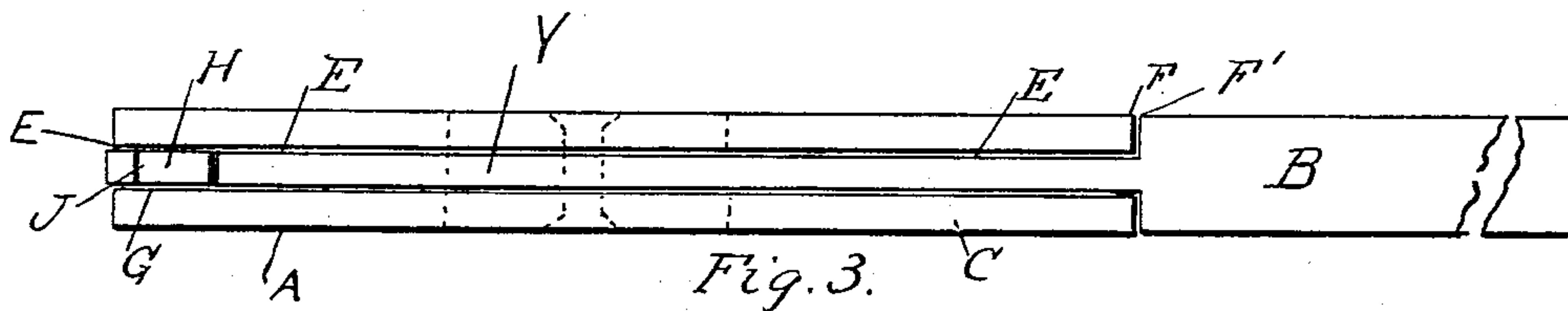
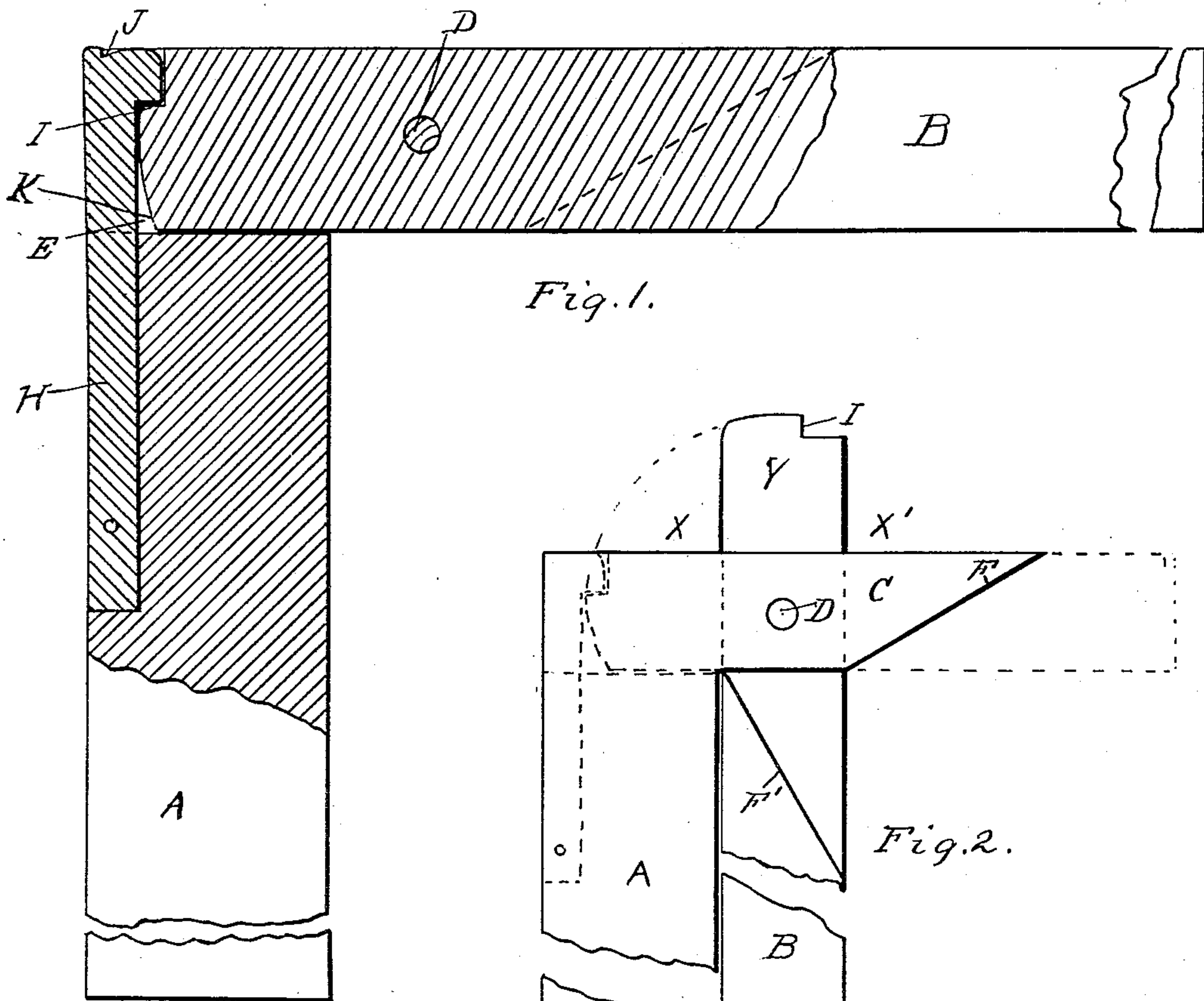
No. 704,074.

Patented July 8, 1902.

E. J. MORRELL.
CARPENTER'S FOLDING SQUARE.

(Application filed Aug. 26, 1901.)

(No Model.)



Witnesses.
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UNITED STATES PATENT OFFICE.

EDWARD J. MORRELL, OF QUINCY, MASSACHUSETTS.

CARPENTER'S FOLDING SQUARE.

SPECIFICATION forming part of Letters Patent No. 704,074, dated July 8, 1902.

Application filed August 26, 1901. Serial No. 73,273. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. MORRELL, a citizen of the United States, residing at Quincy, in the county of Norfolk, Commonwealth of Massachusetts, have invented certain new and useful Improvements in Carpenters' 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.

My invention relates to improvements in carpenters' squares, and more particularly to such as are capable of being folded up to adapt them to be carried conveniently in the ordinary carpenter's tool-box. It is particularly designed to render such a square capable of being locked automatically when the folding arm is moved into its normal position. It is also designed to form small try-squares at the end when folded up, and it is also designed to be adapted to be used as a T-square when folded up.

In the drawings herewith accompanying and making a part of this application, Figure 1 is a plan view of my improved square with parts broken away. Fig. 2 is a plan view of my improved square folded up, and Fig. 3 is an end elevation of the square in its normal position.

Same letters of reference refer to like parts.

In said drawings, A represents the long arm of the square, and B the short arm. The long arm of the square has a laterally-projecting portion C, to which the short arm is pivotally joined by a pivot D, said projection and short arm being of the same width. Said projection C and the end of the long arm of the square adjacent to said projecting portion are recessed, as seen at E in Fig. 3, to receive the end of the short arm of the square, which is reduced in thickness at that end, so that when the short arm is moved into its extended position the projection on the long arm of the square and the short arm form a continuous straight surface, as seen in Fig. 1. The ends F of the projection terminate in a form adapted to engage the abutting edges F' of the short arm adjacent to the reduced portion, as seen in Fig. 2, being in this case a plain diagonal surface. The pivot is located midway between the sides of the projection of the long

arm of the square and midway between the sides of the short arm and in such position that when folded the two arms will lie parallel and in contact, as seen in Fig. 2. It will be evident also that when folded the end of the short arm of the square will project beyond the outer edge of the projection on the long arm and in a direction perpendicular thereto, thus forming try-squares X and X' at either side of the end of the short arm, and inasmuch as the projecting end Y of the short arm is of less thickness than the long arm and its projection it can be conveniently used as a T-square. The automatic locking of the two arms in extended position I secure by mounting in a recess G in the outside edge of the long arm of the square a spring locking-latch H, adapted to engage a shoulder I on the outside edge of the short arm of the square, as seen in Fig. 1. The spring-latch is designed when the square is in operative position to be entirely concealed in this recess. It is provided with a recess J in the top to enable it to be engaged readily by the finger to withdraw it when it is desired to unlock the latch to fold the square. The end of the short arm may be chamfered, as seen at K, to facilitate the automatic forcing outward of the spring-latch prior to its engagement with the shoulder.

The operation of my improved square will be readily apparent from the drawings and description. To fold the square, first withdraw the spring-latch from engagement with the shoulder on the end of the short arm and turn the short arm on its pivot. To open the square, turn the short arm outward, and the latch operates automatically to lock it in operative position.

Having thus described my invention and its use, I claim—

A folding square composed of two members, one member consisting of one entire arm and a right-angle projection integral therewith, said projection and the end of the arm adjacent thereto being recessed, the free ends of said arm being diagonal to its length, the other member maintaining the same width as said projection but having a portion of less thickness adapted to enter said recess, said reduced portion having its upper outer edge recessed and its under outer edge chamfered, a pivot connecting the two parts, a

spring-latch secured to the first member in
the path of said chamfered edge and adapted
to be engaged and forced outwardly thereby
and to automatically engage said recess in
5 the second member and lock it when in opera-
tive position, diagonal abutting shoulders ad-
jacent to the reduced portion adapted to en-
gage the diagonal ends of the other member,
the portion of said folding member beyond
10 the pivot being of greater length than the
width of the projection from the pivot-point

to the edge thereof, whereby, when folded,
angles of ninety degrees are formed on the
outside thereof and an angle of more than
ninety degrees on the inside thereof. 15

In testimony whereof I affix my signature,
in presence of two witnesses, this 21st day of
August, 1901.

EDWARD J. MORRELL.

Witnesses:

LEONARD G. ROBERTS,
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