No. 801,065. PATENTED OCT. 3, 1905.

R. MacD. DIXON.

ADJUSTABLE SQUARE.

APPLICATION FILED MAY 16, 1904.

Fig. 1.

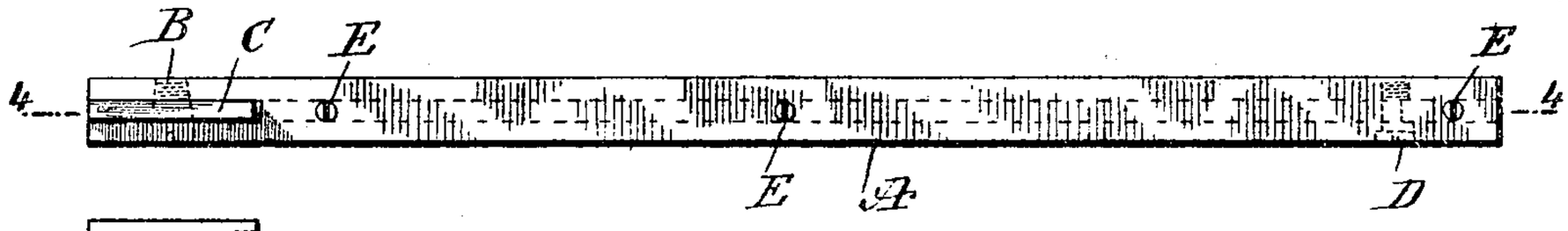


Fig. 2.

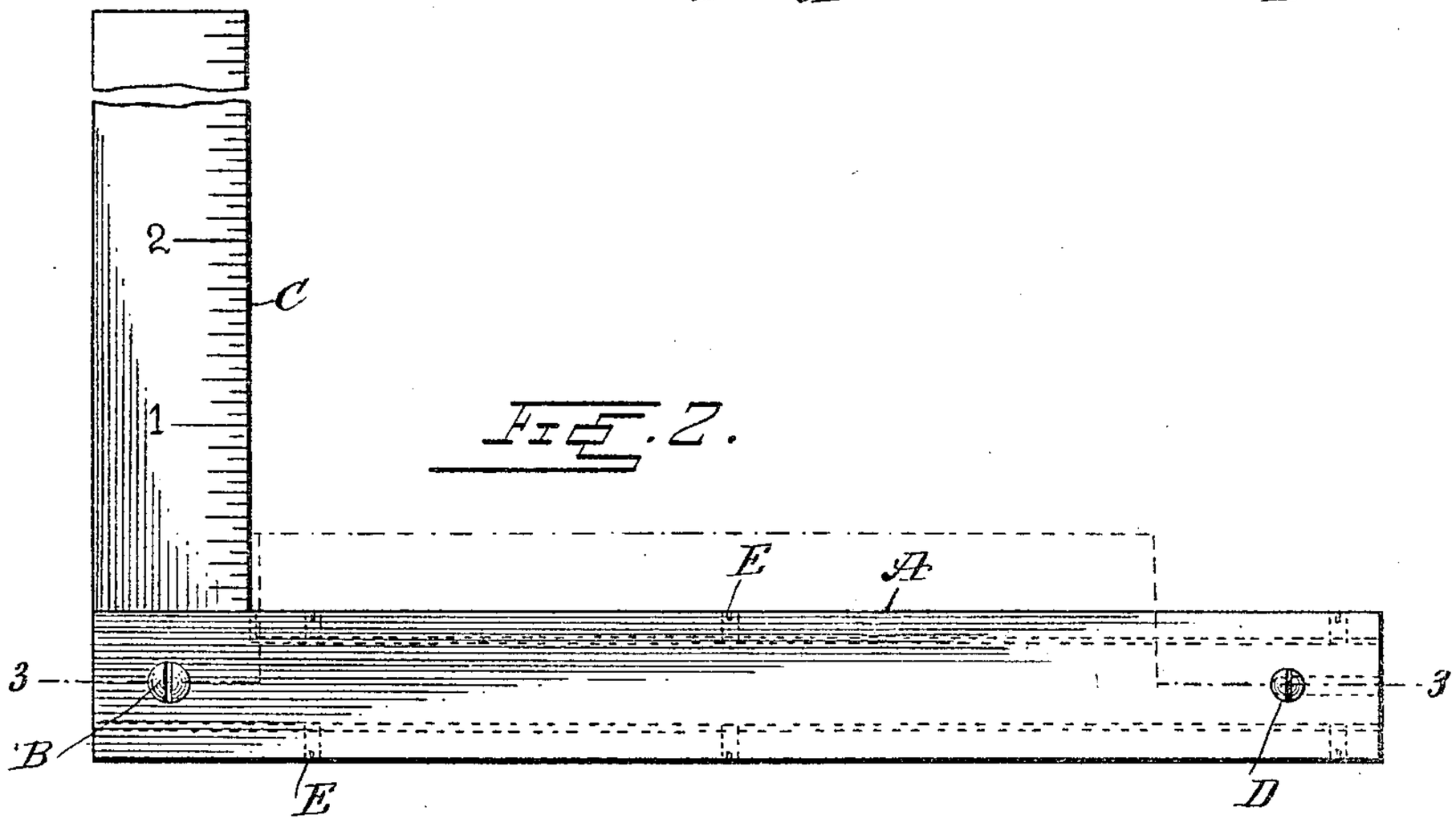


Fig. 3.

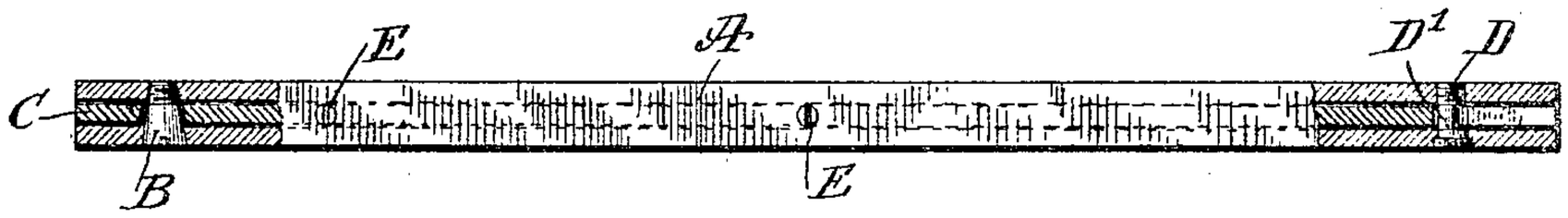
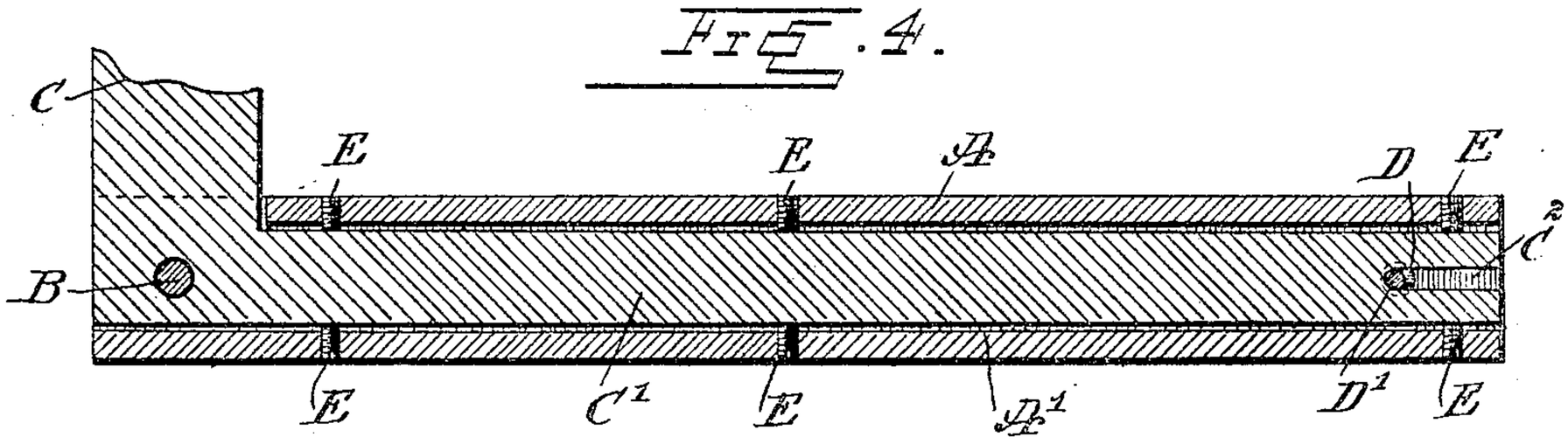


Fig. 4.



WITNESSES:

C. Munter

Rud. J. Hoster

INVENTOR

Randall MacDonald Dixon

BY

Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

RANDALL MacDONALD DIXON, OF STOCKTON, CALIFORNIA.

ADJUSTABLE SQUARE.

No. 801,065. Specification of Letters Patent. Patented Oct. 3, 1905.

Application filed May 16, 1904. Serial No. 208,151.

To all whom it may concern:

Be it known that I, RANDALL MacDONALD DIXON, a citizen of the United States, and a resident of Stockton, in the county of San Joaquin and State of California, have invented a new and Improved Adjustable Square, of which the following is a full, clear, and exact description.

The invention relates to measuring instruments; and its object is to provide a new and improved adjustable square which is simple and durable in construction and arranged to permit convenient adjustment of the blade relative to the base to set the members of the square accurately at a right angle one to the other.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a top edge view of the improvement. Fig. 2 is a plan view of the same. Fig. 3 is a sectional plan view of the same on the line 3 3 of Fig. 2, and Fig. 4 is a sectional plan view of the improvement on the line 4 4 of Fig. 1.

The base A of the square is provided at or near one end with a transversely-extending pivot B, on which is mounted to swing a blade C, having the usual graduation, and from the pivotal end of the said blade C extends integrally an adjusting-arm C′, arranged lengthwise in a longitudinal opening A′, formed on the base A, so as to be concealed within the base.

On the outer end of the angular arm C′ is formed a longitudinal slot C^2, engaged by the eccentric portion D′ of an eccentric-pin D, extending transversely and in the form of a set-screw screwing in the base A, as plainly illustrated in Fig. 3.

By the operator turning the eccentric-pin D with a screw-driver or other suitable tool an up or down motion is given to the angular arm C′, and consequently to the blade C, to permit of bringing the blade C accurately into a right-angular position relative to the base A. When this adjustment has been made, then the angular arm C′ is locked against swinging movement, and for this purpose a number of set-screws E are employed, screwing in the top and bottom of the base A against the top and bottom edges of the angular arm C′.

In case the square gets out of true then the operator only unscrews the set-screws E and turns the eccentric-pin D until the blade C is brought back into an accurate right-angular position relative to the base A, and then the set-screws E are again screwed up to lock the angular arm C′, and consequently the blade C, against movement.

From the foregoing it will be seen that the square is very simple and durable in construction and can be cheaply manufactured and readily adjusted at any time to bring the members of the square into an accurate right-angular position.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An adjustable square, comprising a hollow base having in its top an opening leading out through one end thereof, a blade provided with a right-angle arm projecting from one end flush with said end and having an opening in its outer end, the blade being pivoted in the base with its arm extending into the hollow base, the blade projecting out through the opening in the base with its longitudinal edge flush with the end of said base, and an eccentric mounted in the base and working in the opening of the arm of the blade.

2. An adjustable square comprising a base formed with a longitudinal opening, a blade fulcrumed on the said base, near one end thereof, the blade being provided with an integral angular arm extending lengthwise in the opening of the said base, means on the base and engaging the said angular arm, for imparting a swinging motion to the blade, and means on the base to engage the angular arm and lock the same and the blade against movement relative to the base.

3. An adjustable square comprising a base, a blade pivoted thereon and provided with an integral angular arm extending lengthwise in an opening in the base, an eccentric-pin mounted to turn in the base and engaging the said angular arm, and set-screws screwing in the base against the said angular arm, to lock the latter and with it the blade against movement.

4. An adjustable square comprising a base, a blade pivoted thereon and provided with an integral angular arm extending lengthwise in an opening in the base, an eccentric-pin mounted to turn in the base and engaging the

said angular arm, and set-screws screwing in the base against the said angular arm, to lock the latter and with it the blade against movement, the said set-screws screwing at the top and bottom of the said base and engaging the top and bottom edges of the angular arm.

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

RANDALL MACDONALD DIXON.

Witnesses:
FRED PERMIN,
JOS. BINDER.