

No. 847,208.

PATENTED MAR. 12, 1907.

L. V. SHEPHERD.

SQUARE.

APPLICATION FILED SEPT. 20, 1906.

Fig. 1,

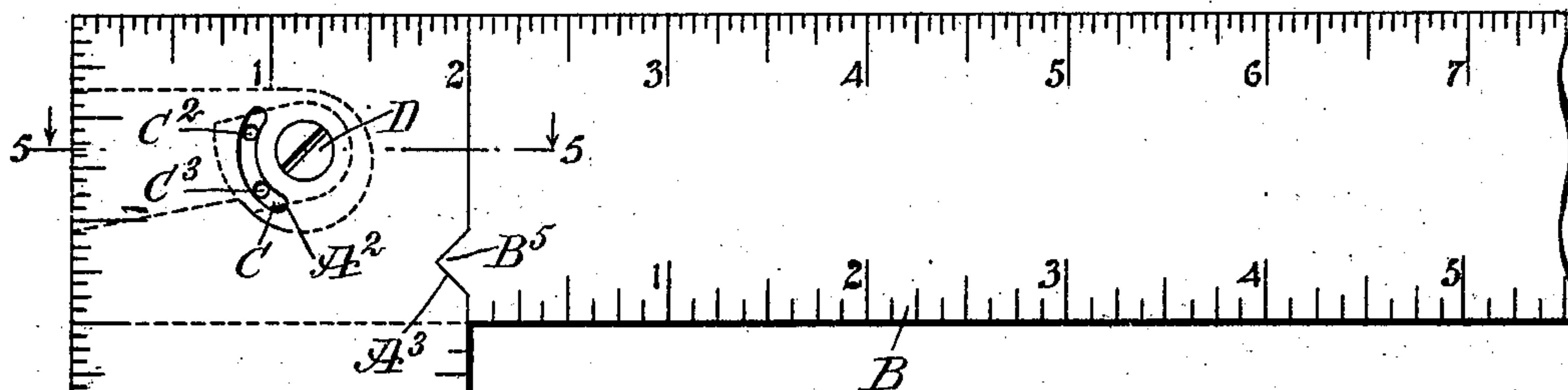


Fig. 2,

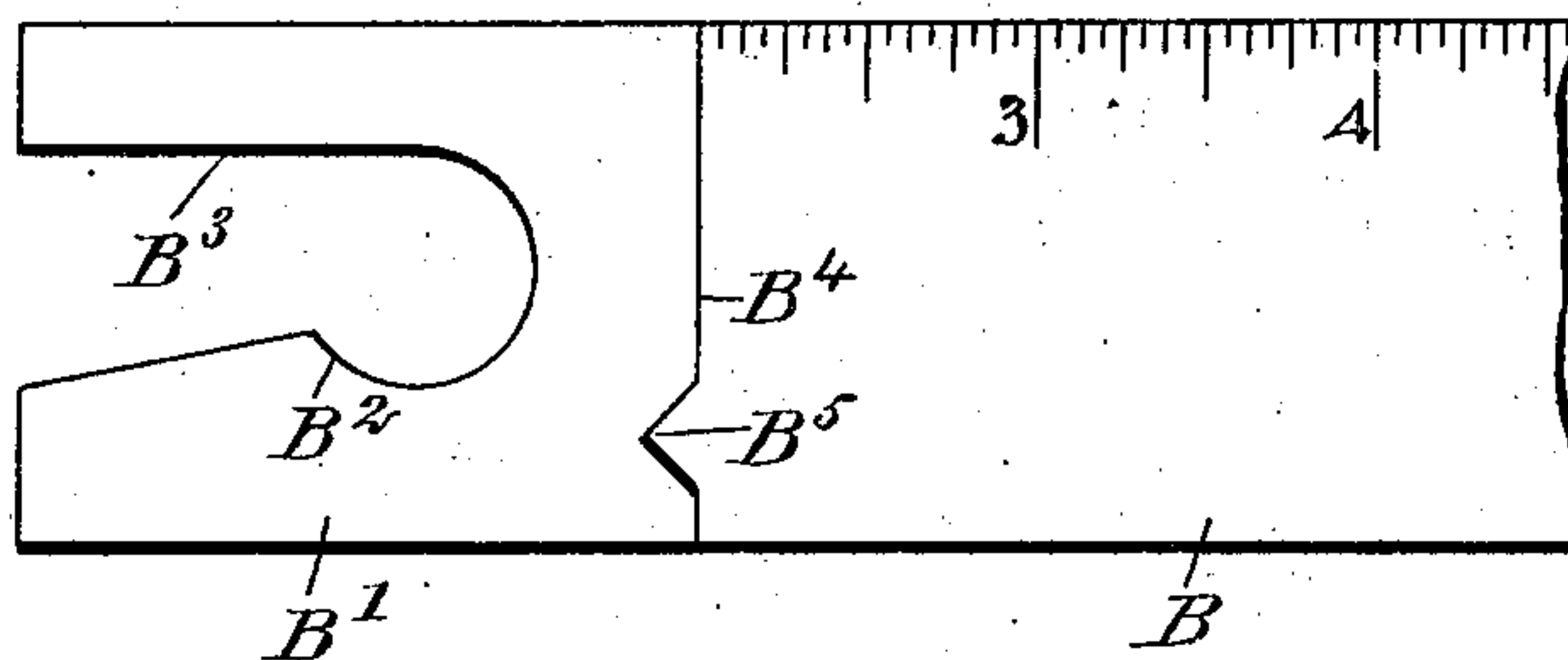


Fig. 3,

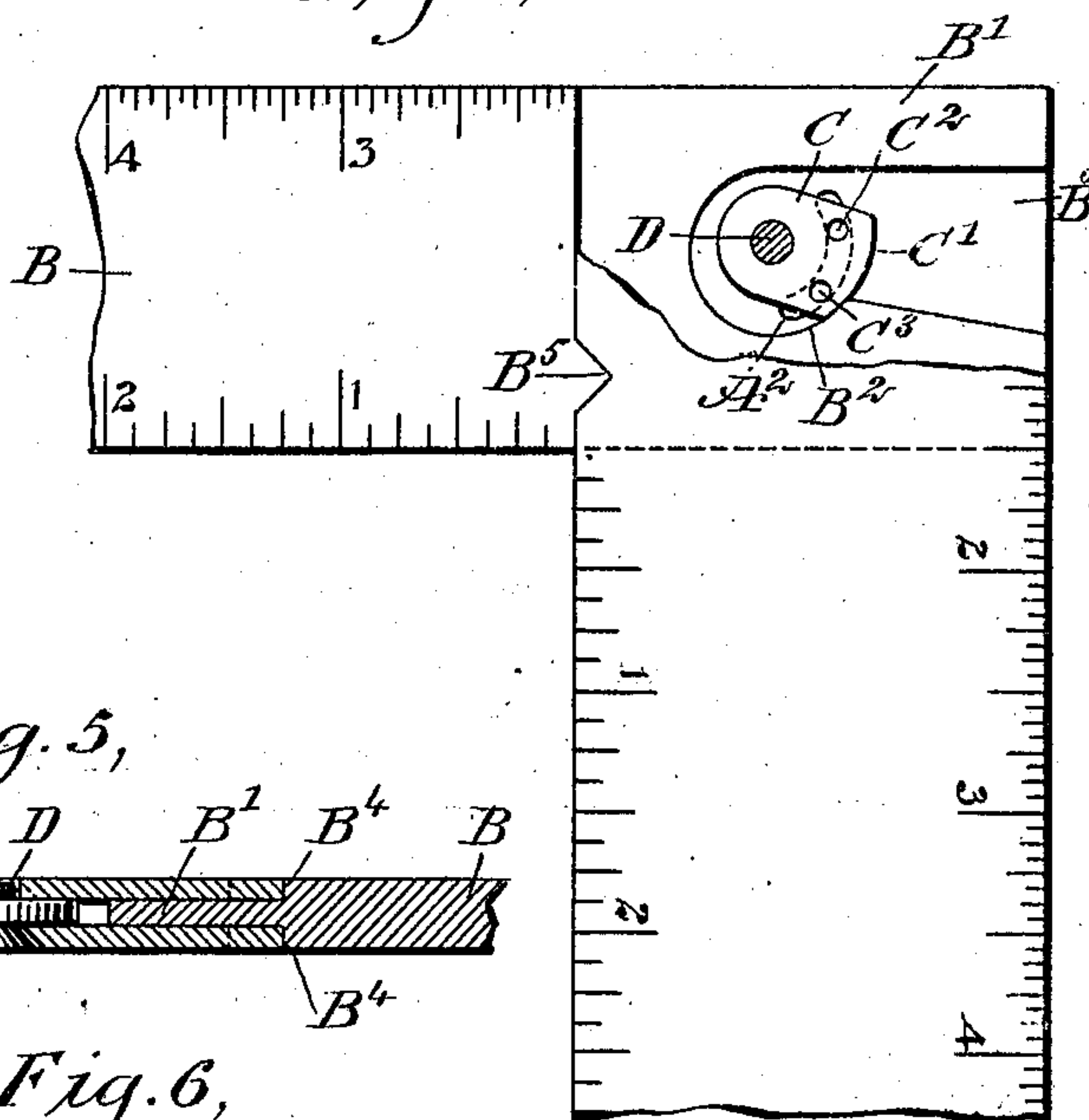


Fig. 5,

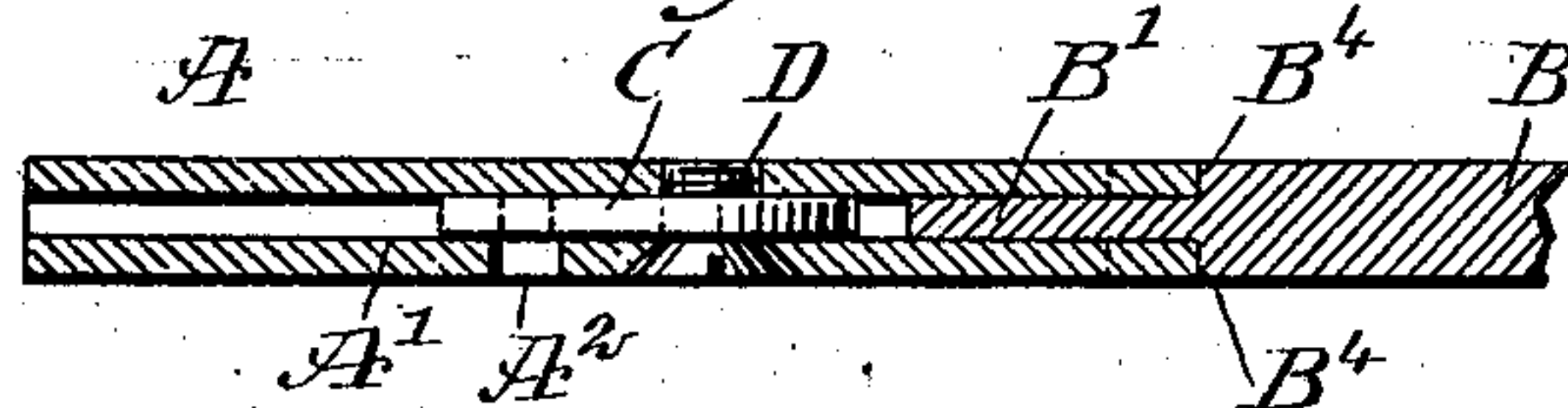
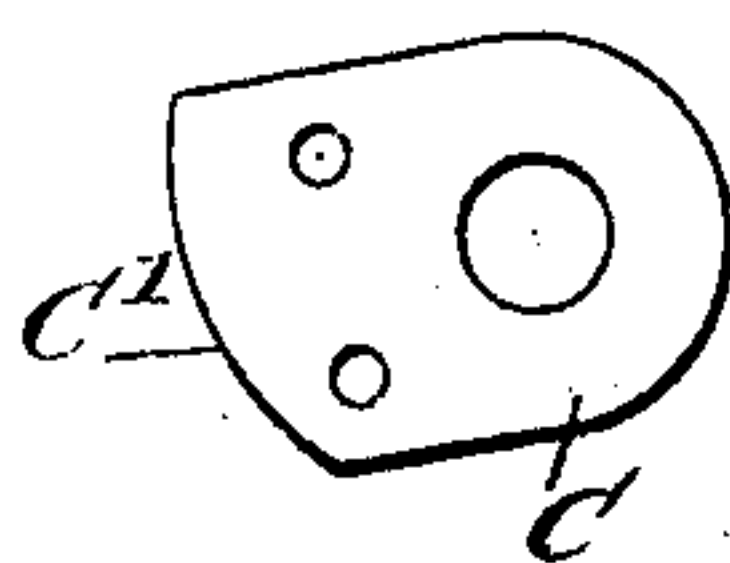


Fig. 6,



WITNESSES

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SQUARE.

No. 847,208.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed September 20, 1906. Serial No. 335,393.

To all whom it may concern:

Be it known that I, LONELL VERNER SHEPHERD, a citizen of the United States, and a resident of Los Angeles, in the county of Los Angeles and State of California, have invented a new and Improved Square, of which the following is a full, clear, and exact description.

The invention relates to drafting instruments; and its object is to provide a new and improved square for the use of carpenters, machinists, and other mechanics and arranged for convenient detachment of the members to permit the mechanic to readily carry the square in the tool-chest, and to allow of quick and accurate assembling of the members whenever it is desired to use the square for its legitimate purpose.

The invention consists of novel features and parts and combinations of the same, which 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 plan view of the improvement. Fig. 2 is a plan view of the detached member of the square. Fig. 3 is an inverted plan view of the improvement, parts being in section. Fig. 4 is an edge view of the same. Fig. 5 is an enlarged sectional side elevation of the improvement on the line 5 5 of Fig. 1, and Fig. 6 is an enlarged face view of the locking cam or lever.

The legs or members A and B of the square are separably connected with each other, and for this purpose the member A is provided at one end with a socket or recess A' for the reception of a tongue B', formed at and projecting from one end of the other member B. Now in order to securely lock the tongue B' in position in the socket A' and to hold the member B accurately in the right-angled position relative to the member A the following arrangement is made: Within the socket A' is contained a locking cam or lever C, mounted to swing on a clamping-screw D, extending transversely through the front plate of the socket A' and screwing into the rear plate thereof, as plainly shown in Fig. 5, so that on screwing up the clamping-screw D the front and rear plates of the socket A' are drawn toward each other to clamp the locking-cam C in whatever position it is in at the time. When the clamping-screw D is

slightly unscrewed and the front and rear plates of the socket A' are released, then the locking cam or lever C is free to swing on the screw D as its fulcrum and its cam edge C' is adapted to engage or disengage the cam edge B² of the wall of a slot B³, formed lengthwise in the tongue B' from the outer end thereof inward, as plainly shown in Figs. 2 and 3, so that when the tongue B' engages the socket A' then the screw D as well as the locking-cam C extend freely in the slot B³, and the locking-cam C can be readily swung in and out of engagement with the cam edge B². On swinging the locking-cam C into an uppermost position the tongue B' can be readily engaged and disengaged with the socket A', and when the tongue B' is engaged with the socket A' and the operator swings the locking-cam C downward then the cam edge C' in moving into engagement with the cam edge B² causes a firm drawing of the tongue B' into position in the socket A', at the same time locking the tongue B' against movement in the socket A'. When this has been done, the operator simply screws up the screw D to clamp the locking-cam C into place within the socket A', as previously explained. When it is desired to disconnect the member B from the member A, it is only necessary to slightly unscrew the screw D and to then swing the locking-cam C upward until the cam edge C' has disengaged the cam edge B², after which a pull exerted on the member B disengages the tongue B' from the socket A'. In order to permit of conveniently swinging the locking-cam C up or down, the front face thereof is provided with recesses or apertures C² C³, adapted to be engaged by a suitable tool inserted through a segmental slot A², formed in the front plate of the socket A', as plainly indicated in Figs. 1, 3, and 5. For swinging the locking-cam C upward use is made of the uppermost recess C², and for swinging the locking-cam downward the operator inserts the tool in the recess C³. The member B forms at the beginning of the tongue B' and on opposite faces shoulders B⁴ for engagement with the front edge of the socket A' to hold the members A and B in a right-angled position when assembled and locked in place as above described and shown in Figs. 1 and 3. A V-shaped lug B⁵ is also formed on each shoulder B⁴ and is adapted to engage a corresponding recess A³, formed in the front edge of the socket A' to aid in holding the member B in

an accurate right-angled position relative to the member A.

From the foregoing it will be seen that a mechanic or other person can readily disconnect the members A and B, so as to allow of conveniently carrying the square in a tool-chest or the like, and the mechanic can conveniently and accurately assemble the members to permit of making use of the square for its legitimate purpose.

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

1. A square having detachable members, one of which is provided with a socket and the other with a tongue fitting into the socket, the tongue having a slot, a locking-cam within said socket and engaging the wall of the said slot to lock the tongue against movement in the socket, and a clamping-screw engaging the front and rear plates of the said socket and extending through the said tongue-slot, the said screw forming the fulcrum for the said locking-cam to swing on and also serving to draw the plates of the socket toward each other to clamp the locking-cam in position.

2. A square having detachable members, one of which is provided with a socket and the other with a tongue fitting into the

socket, the tongue having a slot, a V-shaped lug projecting from the member having the tongue and adapted to engage a recess on the entrance end of the said socket, and a locking-cam within the said socket and engaging the wall of the said slot to lock the tongue against movement in the socket.

3. A square having detachable members one of which is provided with a socket and the other with a tongue fitting into the socket, the tongue having a slot formed lengthwise therein and extending from the outer end inward, and a locking-cam within the said socket and mounted to swing, the said cam engaging the wall of the said slot to lock the tongue against movement in the socket, the front face of the cam being provided with recesses adapted to be engaged by a tool to move the cam, and the front plate of the said socket having a segmental slot formed therein and through which the tool may be inserted to engage said recesses in the cam.

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

LONELL VERNER SHEPHERD.

Witnesses:

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