UNITED STATES PATENT OFFICE.

HOWARD A. ROUNDS, OF CHICAGO, ILLINOIS.

T-SQUARE HEAD.

Application filed August 6, 1902. Serial No. 118,586. (No model.)

To all whom it may concern:

Be it known that I, HOWARD A. ROUNDS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in T-Square Heads, of which the following, when taken in connection with the drawings accompanying and forming a part hereof, is a full and complete specification, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

This invention relates to T-square heads, being applicable as well to T-square heads which are adjustable relative to the blade thereof as to T-square heads which are not so adjustable; and the purpose of this invention is to obtain a T-square head at small cost and of simple construction by means of which a series of lines may be drawn which shall be parallel and evenly distant from each other, such T-square head being adjustable to obtain within the limits of the apparatus a determined distance between the lines.

A further purpose is to obtain a T-square head of the kind named which will be easily operated without shock or jar thereto.

In the drawings referred to, Figure 1 is a top plan view of a T-square embodying this invention with a portion of the blade thereof removed. Fig. 2 is an end elevation of the head of the T-square, showing the blade thereof in a side elevation as, say, on line 2 of Fig. 1 viewed in the direction indicated by the arrow. Fig. 3 is a sectional view on line 3 of Fig. 1 viewed in the direction indicated by the arrow. Fig. 4 is a section view on line 4 of Fig. 1 viewed in the direction indicated by the arrow. Fig. 5 is a vertical sectional view of some of the operative parts illustrated in Fig. 3 on an enlarged scale, and Fig. 6 is a top plan view of the under part of the T-square head.

A reference-letter applied to designate a given part is used to indicate such part throughout the several figures of the drawings wherever the same appears.

A B constitute the head of the T-square, and C the blade thereof. Blade C is preferably made to turn on screw or bolt D as on a pivot and to be held rigidly in an adjusted position, so that lines may be drawn which are not parallel with the sides of the drawing-board.

B is a slot or recess in part B, permitting longitudinal and angular adjustment of blade C.

d is the part of the head of the bolt D by means of which such bolt is turned, and d' is the part or portion of the head of bolt D which is designed to come in contact with the abutment E on strap E and near to contact with plate F. Abutment E is preferably integral with strap E. Plate F is secured to part A of the head of the T-square, as by the screws f f, and abutment E is rigidly secured to part B of the head of the T-square, as by the screws e e in strap E. G is a slot in plate F, through which slot the abutment E extends to a slight distance above the upper face of such plate F. g is one end of slot G. H thus occurs that when the part d' of bolt D is turned firmly down upon the abutment E, as by turning the screw-threads d' into the nut H, the parts A and B of the head of the T-square will be held together, but not closely, so that such parts may be moved relative to each other. To do away with friction between such parts A B, I prefer to place the balls I I between the parts A B in grooves J J, respectively.

To hold the blade C firmly in an adjusted position in part B of the head, I attach plate K to the blade C, as by screws k k, and embed the nut H in blade C underneath the plate 85 K, so that such nut will not turn in such blade. The nut H is drawn upward on the bolt D as such bolt is turned to bring the part d' of the head of the bolt into close contact to abutment E, as hereinbefore described, and the plate K is thus drawn upward and forced against the underside of the abutment E. The underside of the abutment E is preferably made circular in horizontal section, as is illustrated at L in Fig. 6, with annular 95 ribs and grooves l l' between the meeting faces of such part L and the plate K. (See Figs. 3 and 5.) The annular groove and rib l l' also serve to guide the plate K when the blade C is turned for adjustment on bolt D, as hereinbefore described. M, Fig. 1, is a transverse slot in plate F.
1. In a two-part T-square head, the combination of a part provided with a slot therein, a slot in its side, an additional part, an oblong hole therefor, and a screw-threaded hole provided therefor in the additional part, the slot in the additional part being an integral part of the oblong hole, and a screw-threaded hole in the additional part, extending through the abutment and line to a screw-threaded hole provided therefor in the additional part, the slot in the additional part being an integral part of the oblong hole, and a screw-threaded hole provided therefor in the additional part, the slot in the additional part being an integral part of the oblong hole, and a screw-threaded hole provided therefor in the additional part, the slot in the additional part being an integral part of the oblong hole, and a screw-threaded hole provided therefor in the additional part, the slot in the additional part being an integral part of the oblong hole, and a screw-threaded hole provided therefor in 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the adjustable blade, such bolt provided with a head overlapping the sides of the abutment and extending over the slotted part of the head to hold the parts thereof together and also to hold the blade in an adjusted position, a movable abutment on the first-named part, a screw non-rotatably mounted in the movable abutment and a thumb-wheel rotatably mounted on the screw, such thumb-wheel extending through a slot transverse to the first-named slot: substantially as described.

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In presence of—
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