

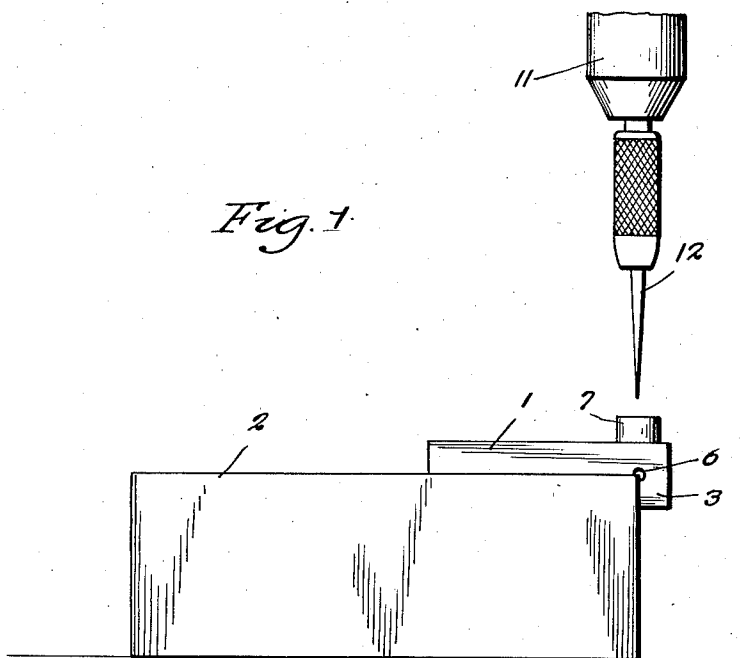
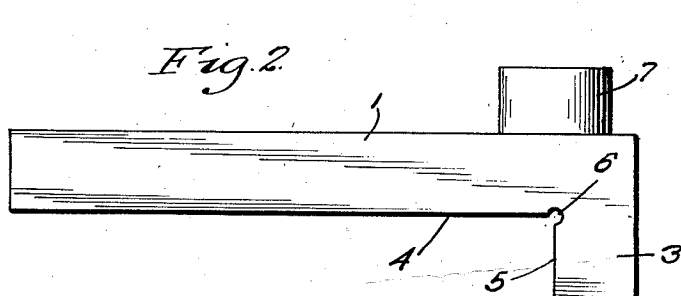
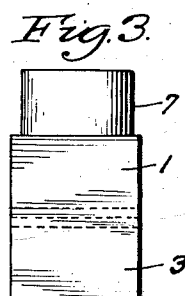
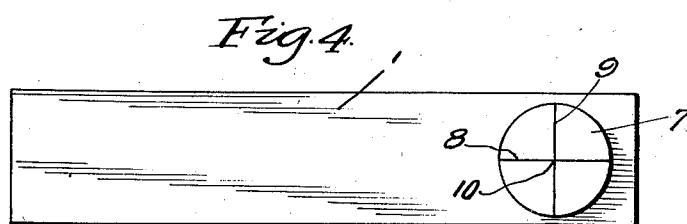
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2,435,799

EDGE FINDER

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UNITED STATES PATENT OFFICE

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EDGE FINDER

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4 Claims. (Cl. 33-112)

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This invention relates to an instrument known as a precision edge finder, and is used by machinists operating a jig bore, milling machine, or other machine having an adjustable table, it being one object of the invention to provide a device which may be set in place upon work resting on the table and the table accurately adjusted so that when a socket or opening is formed in the work, the opening will be located in exact predetermined, spaced relation to an edge of the upper face of the work.

Another object of the invention is to provide an instrument of this character so formed that when it is applied to the work with its body portion resting upon the upper surface thereof and a depending arm in flat, face-to-face engagement with a side face of the work, the marked center of a boss extending upwardly from the outer end portion of the body will be in exact alignment with the side edge of the upper surface of the work.

Another object of the invention is to provide an edge finding instrument which is very simple in construction, easy to operate, and capable of being manufactured at small cost.

The invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a view in elevation showing the edge finder in use,

Figure 2 is a view upon an enlarged scale showing the edge finder in side elevation,

Figure 3 is a view looking at the outer end of the edge finder, and

Figure 4 is a top plan view of the edge finder.

This improved edge finder is formed of steel or other suitable material and has a body 1 of such dimensions that when this body or bar is applied to work 2 resting upon the table of a jig bore, it will rest firmly upon the upper surface of the work. A depending arm 3 is formed integral with the outer end of the bar or body 1, and at the intersection of the lower face 4 of the body and the inner side face 5 of the arm 3, there has been formed a groove 6 which provides clearance for the upper edge of the work 2 and thus allows the device to be set in place upon the work with the bar 1 and the arm 2 in flat face-to-face engagement with confronting surfaces of the work. A lug 7 which is circular when viewed in top plan, as shown in Figure 4, is formed integral with the bar or body 1 and extends upwardly therefrom adjacent the outer end thereof. Lines 8 and 9 are marked upon the upper end face of the lug or block 7 and these lines intersect at the point 10 which

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is at the exact center of the lug or block. The point 10 is in exact alignment with the plane or the inner face 5 of the arm 3 midway the width of this arm and midway the width of the bar or body 1. Therefore, when the instrument is applied to the upper surface of the work with the arm 3 in face-to-face contacting engagement with the confronting side face of the work, the center point 10 will be exactly even with the end face of the work engaged by the arm 3.

The edge finder will ordinarily be used with a jig bore, milling machine, or any other machine having an adjustable table and means for adjusting the table so that it may be set to a thousandth or ten thousandth of an inch.

To use the edge finder the work is first clamped to the table of the jig bore and trued with the table by using an indicator 12 fastened in the chuck of the shaft 11 of a jig bore or other machine. Then the edge finder is placed on the work where it is either clamped or held by other suitable means. The work with the precision edge finder clamped to it is moved until the center point 10 of the lug 7 will be in exact alignment with the plane of the inner face 5 of the arm 3 and the center of the shaft of the jig bore. It is only by the use of indicators when the workman is working in measurements of one or two ten-thousandths of an inch that the exact distance for a hole from the edge of the work can be located. Therefore, before this correct distance or measurement can be found, the edge of the work must be correctly established and by use of the improved edge finder this may be done.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Minor changes in the shape, size and arrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

Having thus described the invention, what is claimed is:

1. An edge finder comprising a horizontally extending body provided with a depending arm at its outer end, the under surface of said body and the inner side face of said arm being flat and extending at right angles to each other, there being a groove formed at the intersection of the said surfaces of the body and the arm, and a

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block formed integral with the outer end portion of said body and extending upwardly therefrom, said block having a flat upper end face marked with diametrically extending lines extending in crossed relation to each other and meeting at the center of the said upper end face.

2. An edge finding device comprising a bar having a flat under surface, an arm extending downwardly from the outer end of said bar and having a flat inner side face disposed vertically in intersecting relation to the outer end of the under face of said bar, and a block extending upwardly from the outer end portion of said bar and having its upper end face marked to designate its center, the center marking being exactly in the plane of the inner side face of said arm.

3. An edge finder comprising a body of a length and width adapting it to rest upon the upper surface of work and remain stationary thereon, an arm extending downwardly from said body for engaging a confronting end face of the work, and a member extending upwardly from said body and located partially over said arm, said member having an upper end face marked to designate its

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center, the center marking for the upper end face of said member being located exactly over the inner side face of said arm.

4. An edge finder comprising a body for resting upon the upper face of work, and an abutment member extending downwardly from said body for engaging the outer end face of said work, the upper face of said body having cross lines marking a point located directly over the inner side face of said abutment member, one of said lines being coplanar with said inner side face of the abutment member.

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