(No Model.)

J. J. HARRISON.

STOCK FOR SCREW CUTTING DIES.

No. 522,206. Patented July 3, 1894.

Fig. 1

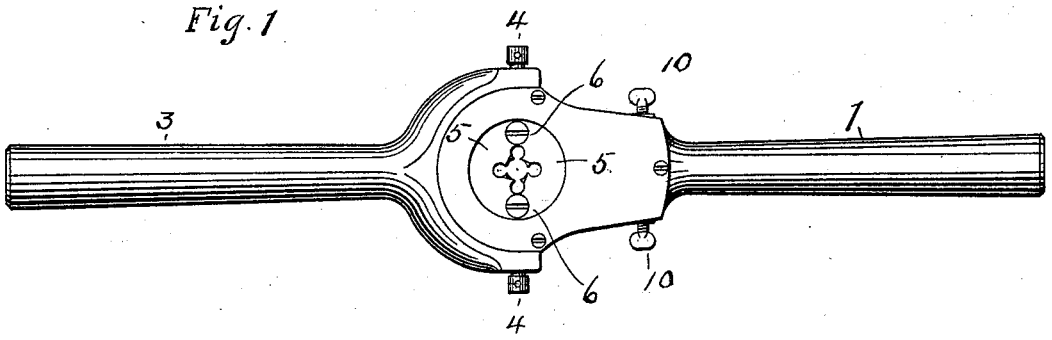


Fig. 2

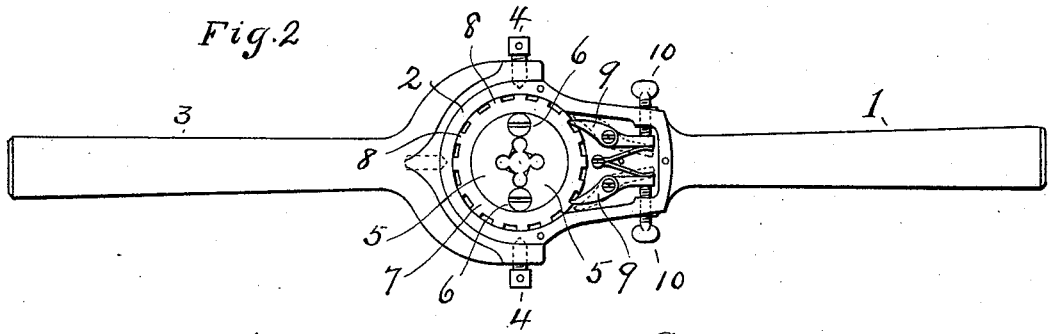
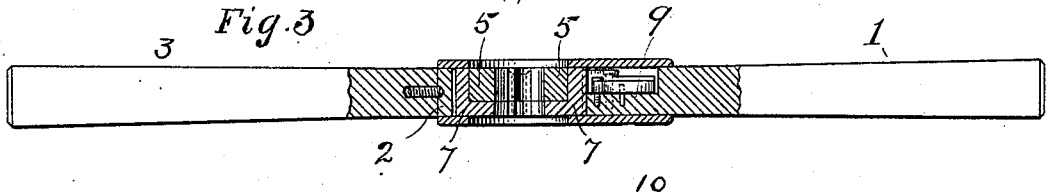


Fig. 3



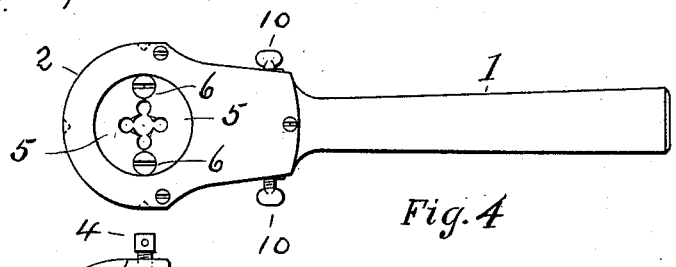
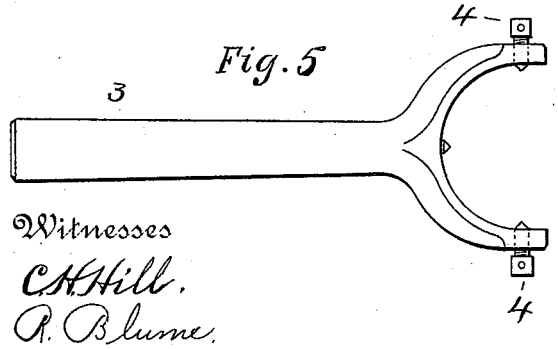


Fig. 4

Fig. 5



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UNITED STATES PATENT OFFICE.

JOHN J. HARRISON, OF EXCELSIOR, MINNESOTA.

STOCK FOR SCREW-CUTTING DIES.

SPECIFICATION forming part of Letters Patent No. 522,206, dated July 3, 1894.

Application filed August 31, 1893. Serial No. 484,431. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. HARRISON, of the town of Excelsior, county of Hennepin, and State of Minnesota, have invented a certain new and useful Improvement in Stocks for Screw-Cutting Dies, of which the following is a specification.

My invention relates to the provision of means for operating the thread-cutting dies for forming screw-threads on bolts, &c., and its principal objects are, first, the providing of a detachable stock portion, and, second, the providing of means whereby the remaining single hand-stock may be used for operating the cutting devices. The dies or cutters thus used may be of any usual or suitable character, as my improvements relate solely to the means for actuating them.

It is one of the principal objects of the invention to devise such construction as will enable one of the arms to be detached if the device is to be used where complete revolutions of the arms are impracticable, and to operate the remaining arm effectually in advance movements only.

My improvements, hereinbefore suggested in a general way only, will be hereinafter specifically described and particularly pointed out in the appended claim.

In the accompanying drawings illustrating my improvements Figure 1, is a plan view of the device; Fig. 2 a similar view with the face-plate removed; Fig. 3 a central longitudinal section of the middle portion of Fig. 1; Fig. 4 a plan view similar to Fig. 1, with the left hand arm of the stock (as shown in that drawing) removed; and Fig. 5 a detailed view of the detachable stock-arm.

In the drawings 1 designates the permanent stock-handle, and 2 the collet or ring formed upon it as a head for receiving the screw-cutting dies; and 3, a detachable handle screwed to the ring 2 by screws 4. The thread-cutting dies 5 used in the ring may be of any usual or suitable kind. As shown they are of the kind well-known as the "Wiley & Russel" in which the die is two-part and adjustable by means of taper-headed screws 6, for governing the size of the cuts.

In the present arrangement the dies, instead of being screwed to the ring 2 are attached by the screws 6 to a ring 7 which has on its periphery teeth 8; and between this and the handle 1, in a space provided for the purpose, are provided dogs 9 for engaging the teeth 8, and these dogs may be controlled by set-screws 10, a slide, or other suitable means, whereby the effective operation of the device may be controlled, so that the dogs may be made to ride over the teeth when the handle is turned in one direction and one of them made to engage the teeth when turned in opposite direction. There are numbers of well-known ratchet devices operated and controlled by springs, dogs, screws, slides, &c., which might with little change be adapted to my present devices for the purposes named; and what has been shown is designed merely to illustrate one of the forms of devices applicable to the improvements.

For ordinary use, where the tool can be continuously revolved both handles may be used, the detachable handle being secured as indicated in Figs. 1 and 2, or by equivalent means permitting its ready removal; and when threads are to be cut under conditions precluding or rendering inconvenient the complete revolution of the stock, the detachable portion 3 may be removed and the remaining portion (shown in Fig. 4) used effectively, by reason of the ratchet devices, by forward and backward movement of the stock-handle 1.

Having described my invention, what I claim is—

The combination, with screw-cutting dies, of a stock carried by one of two handles the other of which spans the stock and is detachably connected thereto by set-screws, and a ratchet-and-dog device connecting the permanent handle with the dies, substantially as set forth.

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