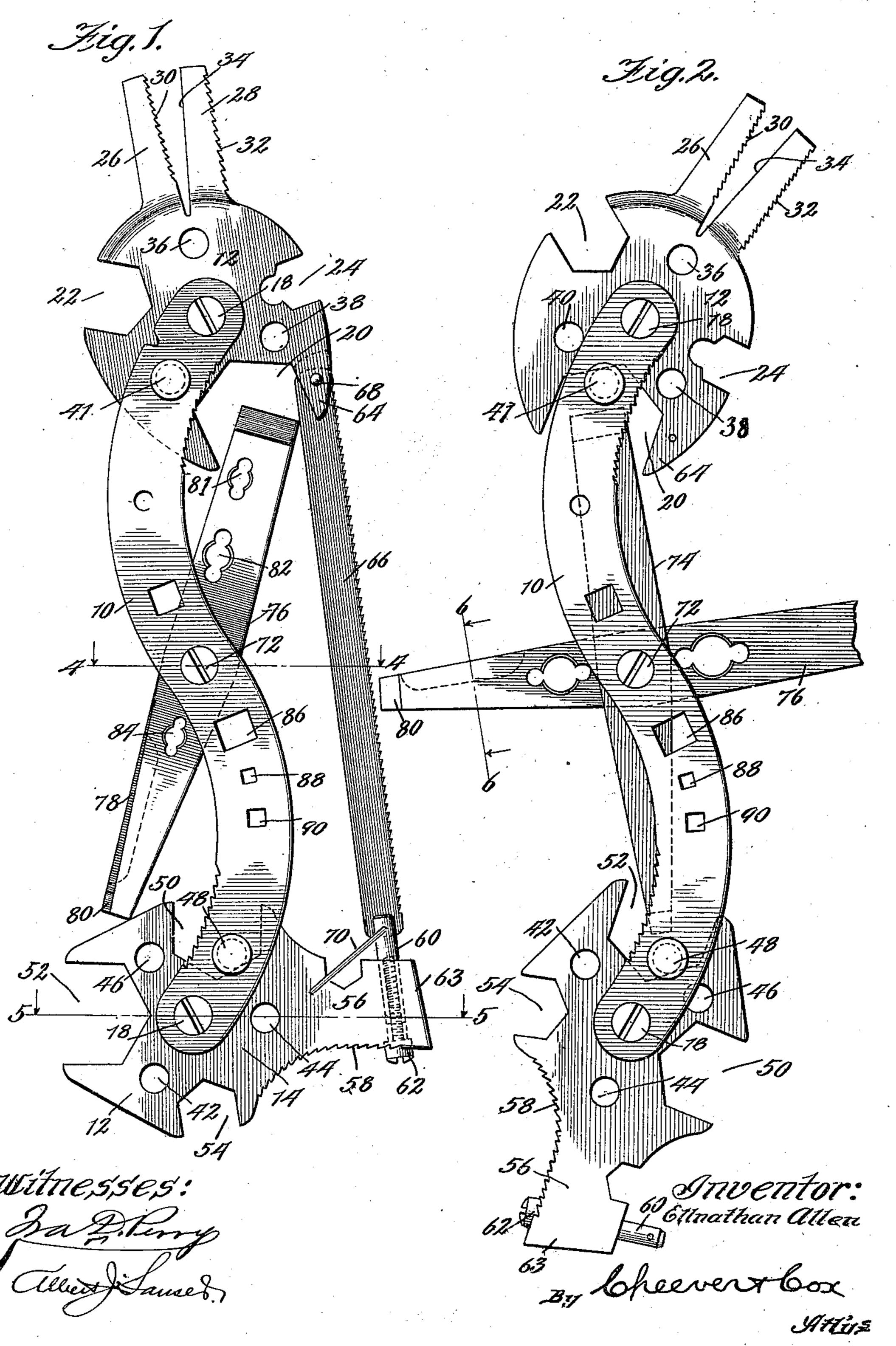
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WRENCH.
APPLICATION FILED APR. 21, 1909.

983,796.

Patented Feb. 7, 1911.

2 SHEETS-SHEET 1.



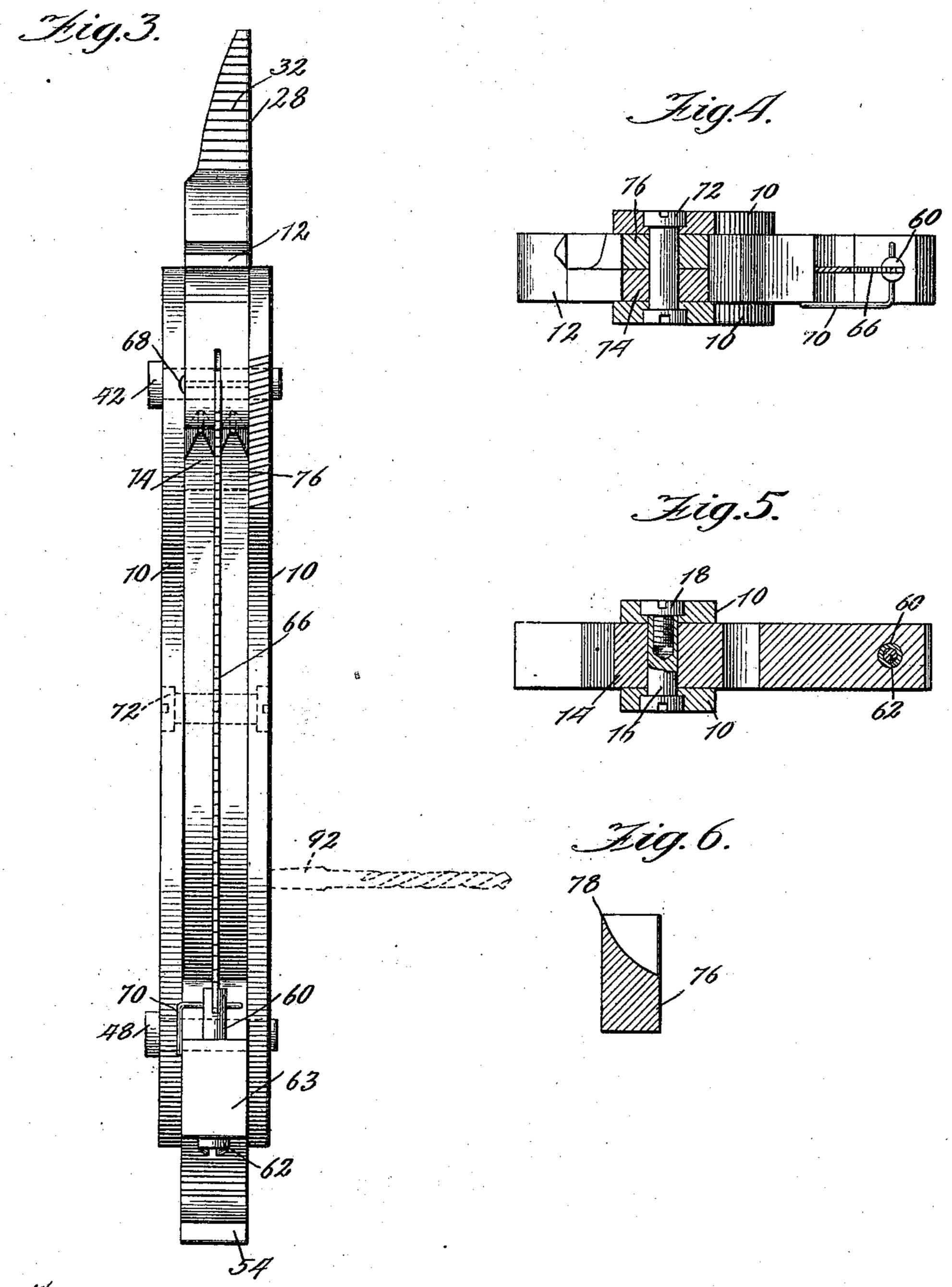
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Witnesses:
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Inventor: 6Unathan Ullen By Cheevers Cox

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UNITED STATES PATENT OFFICE.

ELLNATHAN ALLEN, OF CHICAGO, ILLINOIS.

$\mathbf{W}\mathbf{\hat{R}}\mathbf{E}\mathbf{N}\mathbf{C}\mathbf{H}.$

983,796.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed April 21, 1909. Serial No. 491,307.

To all whom it may concern:

Be it known that I, Ellnathan Allen, a citizen of the United States, residing at Chicago, in the county of Cook and State of 5 Illinois, have invented a certain new and useful Improvement in Wrenches, of which the following is a specification.

This invention relates to wrenches and its object is to provide a wrench device for use 10 in automobiles and the like in which a plurality of different sized wrenches and other tools are rendered available for use with the aid of the least possible number of parts all occupying as small a space as possible.

The invention consists in the parts shown and described hereafter as will be more fully set forth in the specification and claim.

Figure 1 is a plan view of an embodiment of this invention in its preferred form. Fig. 20 2 is a view similar to Fig. 1, the saw being removed. Fig. 3 is a side view of the parts illustrated in Fig. 1 looking at them from the right in said figure. Fig. 4 is a detail view partially in section on the line 4—4 25 Fig. 1. Fig. 5 is a corresponding view on the line 5—5 of Fig. 1. Fig. 6 is a sectional detail view on the line 6—6 of Fig. 2.

The handle of the wrench of this invention consists of two parallel curved members 30 10 preferably curved as shown in Figs. 1 and 2. These members are joined together and to two intervening wrench blocks 12 and 14 by suitable bearing screws 16 locked in position by the lock screws 18. These mem-35 bers 12 and 14 are loosely pivoted upon the bearing member 16 so that when otherwise free they may rotate freely about said bearing members between the parts 10 of the wrench handle. In the wrench block 12 are 40 cut a plurality of wrench members proper 20, 22 and 24 and extending from said wrench member are jaws 26 and 28 provided with ratchet faces 30 and 32. The ratchet face 30 is inclined to the face 34 of member 45 28 so that a suitable wrench is formed between these two faces. This part of the device is also specially adapted for pulling nails. The wrench block 12 is also provided with a plurality of holes, 36,38 and 40 adapt-ed to be entered by a locking pin 42 passing through the wrench handle members 10. By removing this locking pin 42 and rotating this wrench block 12 and then reinserting the pin 42 within a different one of these holes either the jaws 26 and 28 or any one of the wrench members 20, 22 and 24 may be

placed in desired position with reference to the handles for regular wrench service, and by inserting the pin 42 in the position shown in Fig. 2 where it passes through one of the 60 wrench spaces 20, 22 or 24 the handles 10 may be given an oscillatory motion within limits with reference to the blocks 12 and 14 which motion is desirable when it is necessary to operate the wrench in close corners. 65 The opposite wrench block 14 is also provided with holes 42, 44 and 46 corresponding to the holes 36, 38 and 40 of the block member 12 and these last mentioned holes are adapted to be engaged by a locking pin 48 70 corresponding to the pin 41 and similarly engaging the holes 42, 44 and 46 or the wrench openings 50, 52 and 54 of this wrench block 14. This wrench block is provided with a projecting arm 56 having a serrated 75 face 58 and is pierced by pin 60 adapted to be adjusted as to length by the screw 62. The face 63 of this member 56 is especially adapted to be used as a hammer.

One portion of the wrench block 12 for in- 80 stance the jaw 64 adjacent to wrench opening 20 is slotted so that a saw 66 may have one end inserted therein and be secured by the pin 68, the other end of said saw being secured to the pin 60 heretofore described 85 by means of pin 70. The length of the saw and its points of adjustable attachment to the wrench blocks are so proportioned with reference to the pins 41 and 48 that when all the parts are assembled in position as 90 shown in Fig. 1 the saw is practically tight for work, it being however possible to tighten the saw further by rotating the screw 62, screw threaded as best seen in Fig. 1 into pin 60.

Through approximately the center of the handles 10 is a bearing member 72 on which is journaled a plurality of bars 74 and 76 adapted to be rotated in the positions of Fig. 1 and Fig. 2 and on one of these mem- 100 bers as 76 there may be formed if desired a knife blade 78 with a cutting edge. At the end of said member there may be formed another cutting edge 80 adapted to be used as a chisel. The opposite end of the member 105 74 is preferably formed into a screw driver. In one or both of these members 74 and 76 are formed a plurality of openings 81, 82 and 84 in which various tools are formed by which the operator may screw thread bolts. 110 These supplementary members 74 and 76 are of such a length that when the parts of the

wrench are in the position of Fig. 2 they fit in between the wrench openings 20 and 52, where they are locked in position with reference to the handle. The same is true to a 5 limited extent when the parts are in the position of Fig. 1. Through the members 10 are also formed a plurality of noncircular openings 86, 88 and 90 of varying sizes in which augers 92 or other similar tools 10 may be inserted whereby the wrench acts

as a handle therefor. In this device which is adapted to be held in a comparatively small place, I have provided a large number of tools which are of 15 great use to workmen thereby providing in one tool what would otherwise require carrying quite a large number of separate tools which are apt to be lost whereas in this device the only separable and therefore losable 20 parts are the pins 42 and 48 and possibly the saw member 66 and its attaching members 68 and 70 but as these are apt to be frequently wanted there is little danger of their being overlooked or left behind. Attention 25 is also called to the fact that the two members 74 and 76 may be used as a pair of shears the edge 78 doing the cutting.

What I claim as new, and desire to secure

by Letters Patent, is:

A wrench comprising a handle made up of 30 two parallel members, wrench block members mounted between the parallel members of the handle on pivots near the ends thereof, there being wrench openings in the circumferences of said block members, means 35 for locking said block members in fixed positions with reference to the handle, a supplemental working tool consisting of a bar or rod having sharpened ends pivotally. mounted between the parallel members of 40 the handle near the center of the handle, the sharpened ends of said supplemental working tool being adapted when in position substantially parallel to the handle to lie within the recesses in the wrench block 45 members and be guarded thereby when a workman uses the device.

In witness whereof, I have hereunto subscribed my name in the presence of two wit-

nesses.

ELLNATHAN ALLEN.

Witnesses:

DWIGHT B. CHEEVER, CLARA J. CHRISTOFFEL.