The object of my invention is the provision of a practically advantageous brush cutting tool head, designed more especially for fire fighting purposes—i.e., clearing away brush with a view to preventing the spread of forest fires.

To the attainment of the foregoing the present invention as compared with the tool of my Patent 1,469,937 of October 9, 1923, consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings forming part of this specification:

Figure 1 is a view showing the forward side of the tool head which is the lower side in use, Figure 4.

Figure 2 is a view of the rear side of the tool head.

Figure 3 is a view taken from a view point at the right of Figure 4.

Figure 4 is a section taken in the plane indicated by the line 4—4 of Figure 2 looking in the direction indicated by arrows.

Figure 5 is a view of the head as it appears in plan with the handle socket removed.

Figures 6 and 7 are detail views showing the preferred form of the handle socket.

Similar numerals of reference designate corresponding parts in all of the views of the drawings.

My novel tool head comprises a split handle socket 1 which may be connected to the tool head body in the specific manner hereinafter described or in any other approved manner without departure from my claimed invention.

The tool head also comprises the body 2 alluded to, and cutting blades 3, the body 2 being of appropriate metal or alloy, and the blades 3 being of steel and therefore susceptible of being thoroughly sharpened.

The body 2 is of angle form in cross section, and in the present preferred embodiment of the invention said body 2 is provided with projecting lip 4 in the same plane as the body portion 5. The split handle socket 1 is connected in fixed manner to the head 2 by a bracket 6 which is bent over the said lip 4 and the remote edge of the portion 5 and is connected fixedly to said portion 5 by rivets 7, the shanks of which are disposed in the apertures 8, Figure 5, of the portion 5. The handle socket 1 is split at diametrically opposite points as indicated by 1° to afford an automatic means of tightening on the handle, when the wooden handle tends to shrink, due to atmospheric conditions, this always keeping the tool solid on the wood. The socket is made comparatively long, and near its rear end and at right angles to the splits 1° holes 60 are provided in the socket wall so the socket can be drawn tight against the wood handle by means of a bolt.

The body 2 is beveled at 2° so that brush will not be obstructed from a free cut by any blunt edge holding the knives.

In addition to the portion 5 the body 2 has a portion 8 preferably disposed at right angles to the portion 5, and in the edge of the portion 8 remote from the portion 5 are spaced notches 9 of V shape in elevation for an important purpose hereinafter set forth. It will also be noted by comparison of the several figures of the drawings that the portion 8 is provided with protuberances 10, preferably of rounded type, aligned with and arranged immediately adjacent the spires of the notches 9.

The cutting blades 3 are arranged at the back of the body portion 8 and are connected to said body portion 8 by rivets 11. It will also be understood from Figures 2 and 4 that the inner ends of the blades 8 abut solidly against and are backed by the portion 5 of the body 2, and from Figures 2 and 3 it will be understood that the blades 3 are aligned in a series and with their confronting edges against each other.

The side cutting edges of the blades 3 are designated by 12 and the forward cutting edges of the said blades 3 are designated by 13. The said cutting edges are beveled, and it will be noticed that the converging cutting edges 12 of the adjoining blades meet at points in alignment with, but spaced from the body portion 8 and particularly from the apices of the notches 9. The angle of adjoining cutting edges 12 is preferably as illustrated in Figures 1 and 2 inasmuch as experimentation has demonstrated that such
angle is best for the effective cutting of the stalks of brush and the like.

An important feature of my invention resides in the relative arrangement of the notches 9, the meeting points of adjacent cutting edges 12, the beveled body portions and the protuberances 10. This will be better understood when it is stated that the provision of the notches 9 in conjunction with the meeting points of adjoining cutting edges 12 makes provision for the passage of the meeting points of the edges 12 entirely through the stalks of brush before the body contacts with the stalks, assuring an efficient and clean cut, while the protuberances 10 constitute reinforcements and strengthen the notched members of the body portion 8 so that there is no liability of the body 2 being fractured incident to the use of the tool head when tough brush stalks are encountered. Body portion 8 is sharpened at edge to allow brush to slip by.

Incident to the use of my novel tool head the same is manipulated through the medium of a wooden handle (not shown) and with the blades 3 in close proximity to and in parallelism with the surface of the ground. When so used the tool will be found highly efficient for the purpose ascribed to the same.

I have specifically described the preferred embodiment of my invention in order to impart a full and exact understanding of said embodiment. I do not desire, however, to be understood as limiting the improvements to said embodiment, my invention being defined by my appended claims within the scope of which modifications may be made without departure from my invention.

Within the purview of my invention the unbeveled portions of the blades 3 are preferably made long to provide an ample clearance space from the body portion 2 at the notched or beveled edge of the body.

Having described my invention, what I claim and desire to secure by Letters Patent is:

1. A tool head comprising a body with portions at an angle to each other, one of said portions having spaced notches in its edge remote from the other portion, and cutting blades arranged back of and against the notched portion and fixed thereto and abutting against the other body portion and also arranged in alignment in a series and having side cutting edges, the cutting edges of adjoining blades converging toward the body and meeting at points in alignment with the centers of the notches in the body and spaced beyond one edge of the body.

In testimony whereof I affix my signature.

CHARLES H. RICH.