

No. 869,727.

PATENTED OCT. 29, 1907.

J. OLSON & W. J. O. BOALS.

PICK.

APPLICATION FILED NOV. 12, 1906.

Fig. 1.

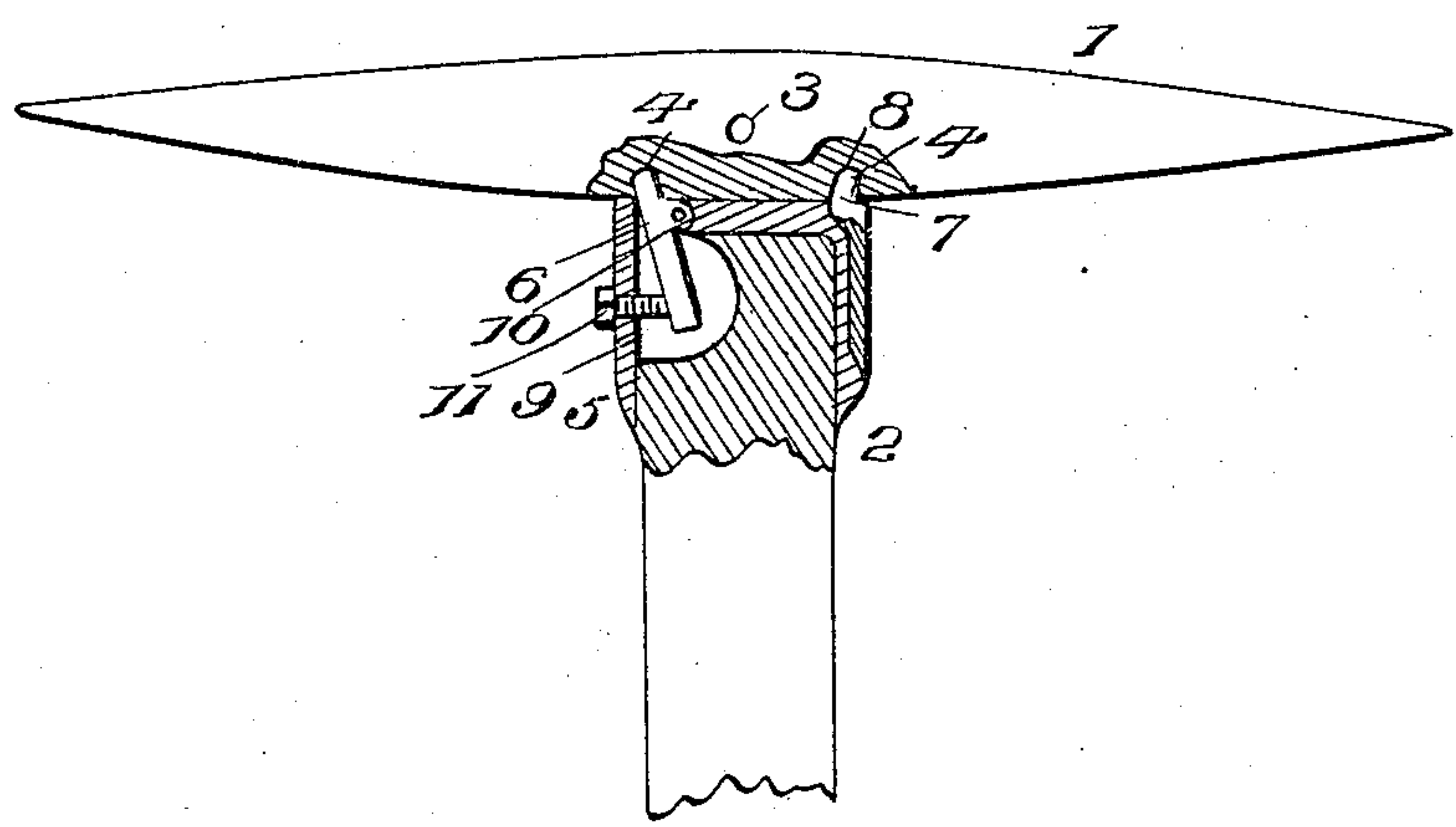


Fig. 2.

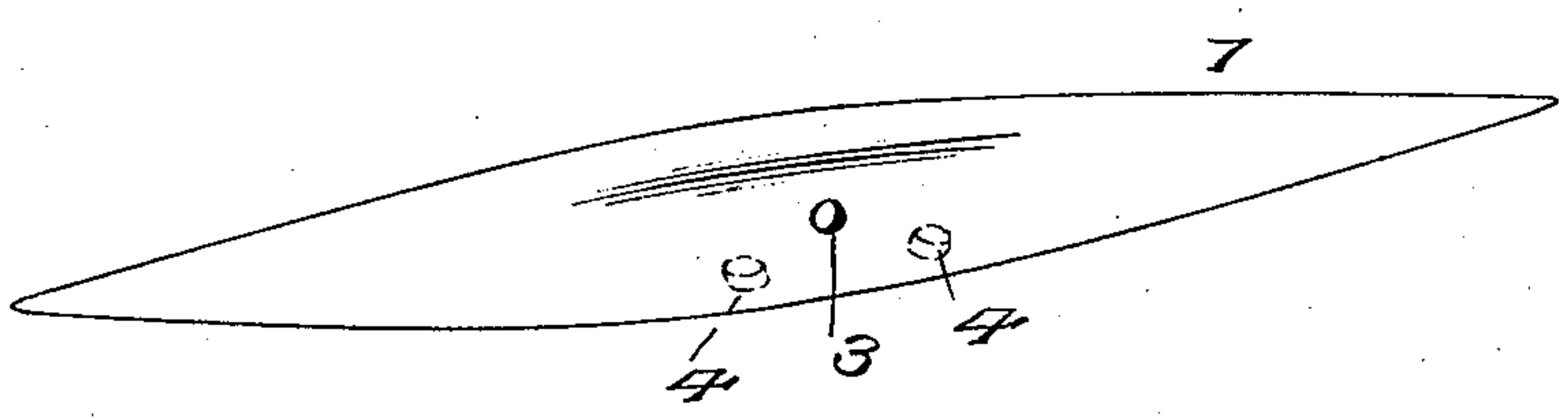
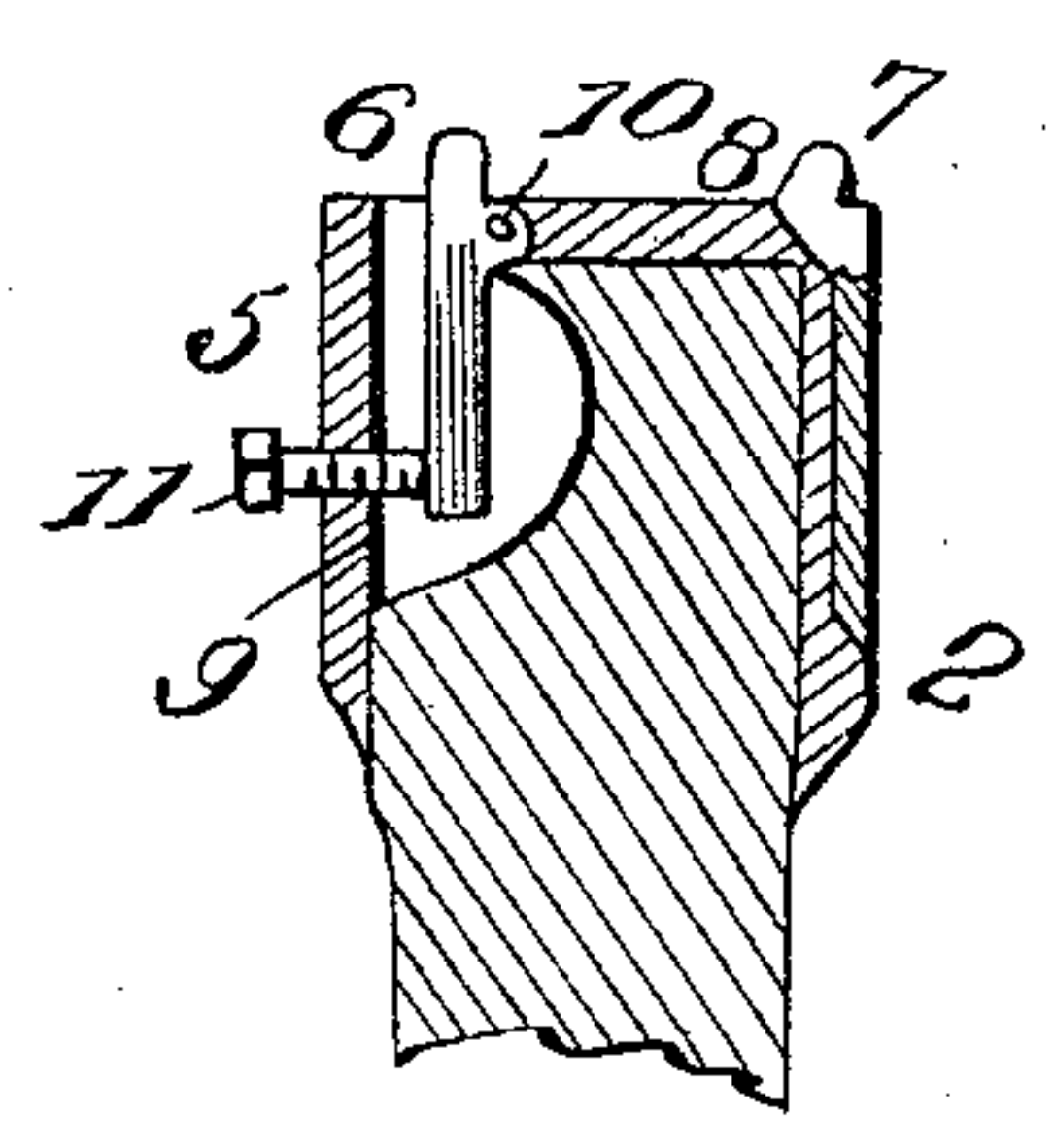


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JACOB OLSON, OF OSKALOOSA, AND WILLIAM J. O. BOALS, OF ALBIA, IOWA.

PICK.

No. 869,727.

Specification of Letters Patent.

Patented Oct. 29, 1907.

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To all whom it may concern:

Be it known that we, JACOB OLSON and WILLIAM J. O. BOALS, citizens of the United States, residing at Oskaloosa and Albia, respectively, in the counties of Mahaska and Monroe, respectively, and State of Iowa, have invented certain new and useful Improvements in Picks, of which the following is a specification.

This invention has relation to picks designed most especially for miners' use and aims to devise novel means which will admit of the pick head being readily detached from the helve or handle for sharpening or other desired purpose and to be quickly replaced, and which provides a firm and secure connection to retain the parts in place when properly assembled and secured.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction and the means for effecting the result, reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features, thereof, still the preferred embodiment is shown in the accompanying drawings, in which:

Figure 1 is a side view of a miner's pick embodying the invention, parts being broken away to show more clearly the relative arrangement of the connecting means. Fig. 2 is a detail view of the pick head. Fig. 3 is a detail view of the end of the helve or handle designed to be coupled to the pick head.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

In its general construction, the pick is of ordinary appearance and comprises the pick head 1 and helve or handle 2, the pick head having opposite depressions 3 intermediate of its ends to receive the usual ring employed for carrying and handling the pick head when detached from its handle. Openings 4 extend into the pick head from the side selected to face the handle and these openings are oppositely inclined so as to receive the interlocking ends of projections extended from the attaching end of the handle.

The handle or helve 2 is provided with a metal socket 5 at its attaching end, said socket being secured thereto in any substantial manner and having openings to receive dogs 6 and 7. One of the dogs is preferably stationary and both dogs have one end extended beyond the attaching end of the handle to form projections which are adapted to enter the oppositely inclined openings 4 and serve to secure the pick head to the handle. The projecting end 8 of the stationary dog 7 is inclined corresponding to the inclination of an open-

ing 4. The dog 6 is adapted to incline throughout its length, hence conforms to the inclination of the cooperating opening 4. The dog 6 is fulcrumed at a point between its ends and is secured to the handle in a way to prevent casual displacement therefrom. The opening 9 in the socket 5 or like part of the handle 2 is enlarged at its inner end to admit of the dog 6 having an oscillatory movement, said dog turning on the overhanging portion 10 forming the contracted entrance of the opening 9, the dog 6 interlocking with the socket or handle at the point 10. A set screw 11 is threaded into an opening in a side of the socket handle and is adapted to bear laterally against the inner end of the dog 6 so as to force said end inward and cause the projecting ends to conform to the inclination of the cooperating opening 4 and to bind against the outer wall thereof and in conjunction with the projection 8 of the dog 7 secure the pick 1 to the handle 2. Upon backing the set screw 11 the inner end of the dog 6 is permitted to move outward, thereby loosening said dog and admitting of detaching the pick head from the handle. It is preferred that the openings 4 be similarly inclined, thereby providing for fitting the projection 8 in either one and admitting of the projecting end of the dog 6 entering the other opening, after which the parts are secured by turning the set screw 11 to cause the projecting interlocking ends of the dogs to bind upon the outer walls of the openings 4.

Having thus described the invention, what is claimed as new is:

1. In a tool of the character set forth, the combination of a head provided with a pair of spaced diverging openings, a handle, a socket fitted upon the end of the handle, a dog rigid with the handle and projecting beyond the end thereof, a second dog pivotally mounted within the socket at an intermediate point, one end of the second dog projecting beyond the handle while the opposite end extends within a recess in the handle, said dogs being designed to enter the before mentioned diverging openings in the head of the pick and lock the head to the handle, and a set screw carried by the socket for locking the movable dog in a fixed position.

2. In a tool of the character specified, the combination of a head provided with a pair of diverging openings, a handle, a socket fitted over the end of the handle, the end portion of the socket having an opening in one side thereof, a movable dog pivoted at an intermediate point within the socket, one end of the movable dog projecting outwardly beyond the socket while the opposite end extends within a recess in the handle, a second dog rigid with the socket and projecting beyond the end thereof, the said dogs being designed to enter the diverging openings in the head and secure the same to the handle, and a set screw carried by the socket for locking the movable dog in a fixed position.

3. In a tool of the character specified, the combination of a head provided with a pair of diverging openings, a handle, a socket fitted over the end of the handle and having an opening formed in one side of the end portion thereof, a movable dog pivoted at an intermediate point upon

5 the socket, one end of the movable dog projecting outwardly through the before mentioned opening, while the opposite end extends within a recess in the handle, the inner portion of the recess being enlarged to permit a swinging motion of the dog, a second dog rigid with the socket and projecting beyond the end thereof, a set screw operating in the socket and engaging the inner end of the movable dog to lock the same in a fixed position, the extremities of the dogs being designed to enter the before

mentioned sockets in the head to secure the same to the 10 handle.

In testimony whereof we affix our signatures in presence of two witnesses.

JACOB OLSON. [L. S.]
WILLIAM J. O. BOALS. [L. S.]

Witnesses:

LENA L. ROWE,
JOHN F. LACEY.