

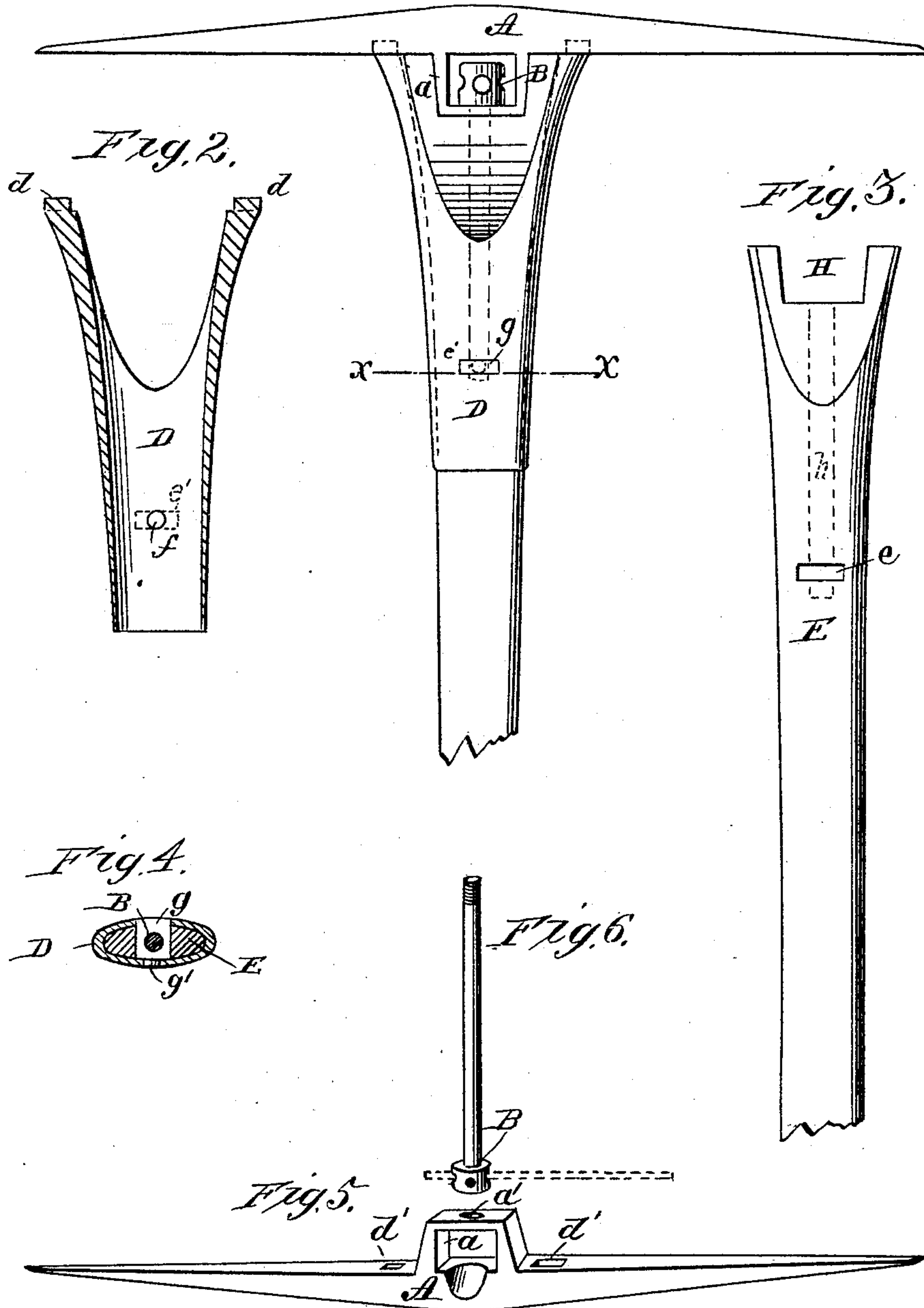
(No Model.)

J. M. MATTHEWS.

MINER'S PICK.

No. 354,331.

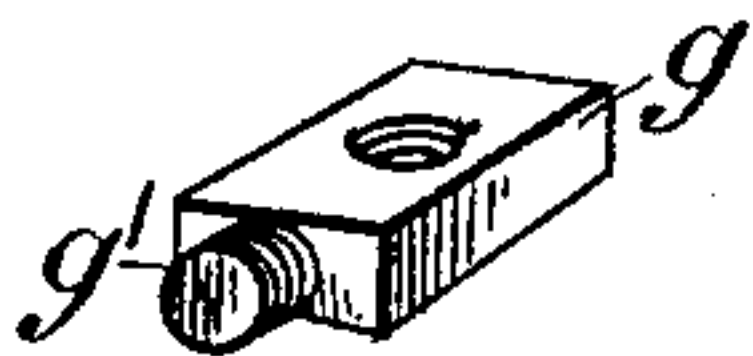
Patented Dec. 14, 1886.



WITNESSES:

J. D. Lafford
C. Sedgwick

Fig. 7.



INVENTOR:

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UNITED STATES PATENT OFFICE.

JAMES MADISON MATTHEWS, OF POCAHONTAS, VIRGINIA.

MINER'S PICK.

SPECIFICATION forming part of Letters Patent No. 354,331, dated December 14, 1886.

Application filed July 1, 1886. Serial No. 206,785. (No model.)

To all whom it may concern:

Be it known that I, JAMES MADISON MATTHEWS, of Pocahontas, in the county of Tazewell and State of Virginia, have invented a new and Improved Miner's Pick, of which the following is a full, clear, and exact description.

My invention relates to miners' picks, and has for its object to produce a light yet strong and durable pick in which the old form of an eye pierced therein is dispensed with in attaching the pick to the handle.

It consists in a pick formed with a yoke solid therewith, and detachably secured to a handle recessed to receive it by a screw-bolt, and in the details of construction of the socket and handle, as will be hereinafter fully set forth and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the pick and handle complete; Fig. 2, a vertical section of the metal socket; Fig. 3, a side elevation of the handle; Fig. 4, a horizontal section through line *x x* of Fig. 1; Fig. 5, a perspective view of the under side of the pick, and Figs. 6 and 7 detail views of the screw bolt and nut.

In the construction of miner's picks the handles have heretofore been to a great extent fastened thereto through eyes pierced in the central portion thereof, necessitating an extra amount of metal at that point, thereby rendering them unnecessarily heavy and clumsy.

I produce a pick, A, presenting a flat even surface upon each side, terminating in the customary-shaped ends, and centrally on the under side I form a yoke, *a*, solid therewith, the said yoke having an aperture, *a'*, (see Fig. 5,) to receive a screw-bolt, B, the head of which is pierced to admit a detachable pin, by which it is turned, as shown in Fig. 6, and the lower edge of the pick upon one side is centrally slightly cut away to permit the entrance of the screw-bolt into the said aperture *a'*.

The handle E is oval in form and gradually tapers from above its center upward to an extended top, which is provided with a wide recess, H, adapted to receive the yoke *a*, extending through from side to side, and also with a passage, *h*, bored therein from the top down-

ward to receive the screw-bolt B. At the bottom of this passage *h* a slot, *e*, is cut through the handle to receive a nut, *g*, which will be hereinafter described. (See Fig. 3.)

The socket D, made to fit the oval contour of the handle E at one end, tapers from bottom to top, adapting itself to the taper of the handle, and terminates in outwardly-flaring bifurcations at the other end, rounded off upon their outer sides, the said bifurcations being provided with lugs *d d*, adapted to fit in recesses *d' d'*, cut in the under face of pick A, upon each side of the yoke *a*. A slot, *e'*, and a circular opening, *f*, are cut in the socket D upon opposite sides in the same line, so that when the socket D has been slid to its position over the handle E, to the contour of which it neatly conforms, the lugs *d d*, engaging the recesses *d' d'* in the pick, and the yoke *a* of the pick resting in its recess H of the handle E, the slot *e'* and the circular opening *f'* in the socket D will register with the slot *e*, cut through the handle E at the end of the passage *h*, made to receive the screw-bolt B. Into the passage thus formed a nut, *g*, having a circular projection, *g'*, (see Fig. 7,) is slid, until the said circular projection *g'* comes through the circular opening *f* in the socket D, flush with the face thereof, the threaded opening of the nut registering with the said passage *h* in the handle E. (See Fig. 4.) The screw-bolt B, being now inserted in the aperture *a'* of the yoke *a* and passed down the passage *h*, engages the threaded opening of the nut *g*, and, by means of a pin placed through the holes in its cap is screwed therein to a firm bearing upon the yoke *a*, thereby clamping the pick securely to the handle, and also by means of the nut *g*, holding the projections *d* of the socket D in engagement with the recesses *d'* of the pick, and the socket to the handle protecting and strengthening the same, as shown in Fig. 1. The handle E, between the bifurcations of the socket D, is shaved off flush with said bifurcations, presenting flat faces upon each side. By this means I am enabled to produce a pick that will be of light weight yet great strength, which in picks for miners' use is the prime object, and again, its construction being simple and the saving of metal great, the cost is far below those in or-

dinary use today; and, further, picks secured to the handle in manner herein described are interchangeable, in that one handle will answer for a number of picks of the same form, and in the event but one style pick is used a new one can be readily and quickly placed upon the handle in lieu of one worn out. The handle, being more or less elastic and well braced, will wear for a year at least, while the handles now placed in miners' picks break very soon, oftentimes not lasting more than two or three days. In this item alone I save considerable expense, and withal provide a cheap, durable, and strong yet light tool.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a miner's pick provided centrally upon its under face with an integral apertured yoke, substantially as shown and described, and for the purposes herein set forth.

2. The combination, with a pick having an integral yoke centrally upon its under face and recesses upon each side of said yoke, of a handle recessed to receive the yoke, a bifurcated socket adapted to embrace said handle, provided with lugs adapted to enter the recesses in the pick, and a fastening-bolt, substantially as herein described.

3. The combination, with a miner's pick provided with the yoke *a*, and having aper-

ture *a'*, of the handle *E*, having recessed end *H*, and central opening, *h*, the screw-bolt *B*, and nut *g*, substantially as and for the purpose herein set forth.

4. The combination, with a miner's pick constructed with a recess, *d'*, on each side of a central yoke, *a*, of a bifurcated socket, *D*, fitted to the handle *E* and provided with lugs *d*, said handle, the bolt *B*, and nut *g*, substantially in the manner and for the purpose herein set forth.

5. A miner's pick constructed with a yoke, *a*, upon its under side, having an aperture, *a'*, and recesses *d'*, in combination with a bifurcated socket, *D*, having lugs *d*, slot *e'*, and circular opening *f*, the handle *E*, having the recess *H*, central opening, *h*, and slot *e*, and the screw-bolt *B* and nut *g*, substantially in the manner and for the purpose herein set forth.

6. In a miner's pick, the combination of the handle *E*, having the recess *H*, central opening, *h*, and slot *e*, the bifurcated socket *D*, provided with lugs *d* upon its bifurcations, and having the slot *e'* and circular opening *f* upon opposite sides in line with each other, the nut *g*, having projection *g'*, and the bolt *B*, substantially in the manner and for the purpose herein set forth.

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Witnesses:

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