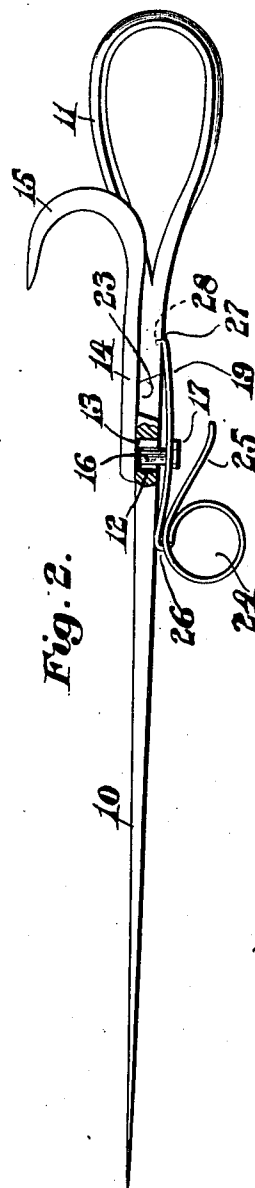
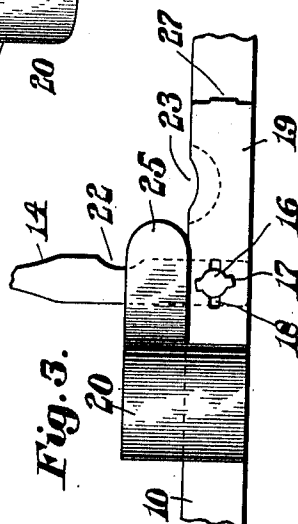
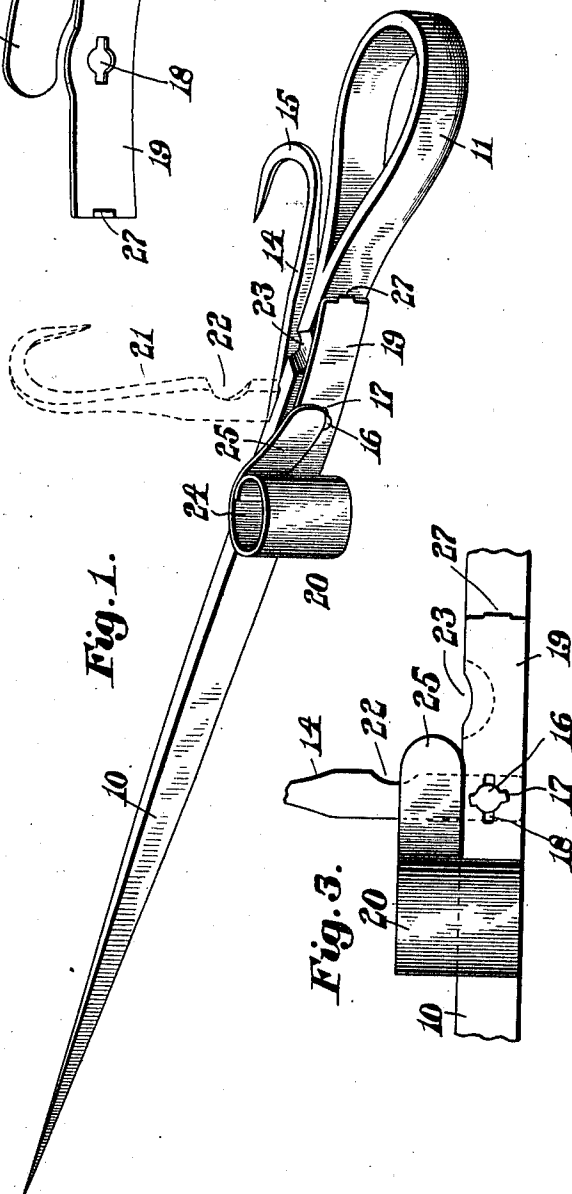
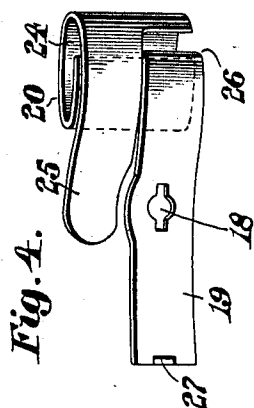


A. VIERA.
MINER'S CANDLESTICK.
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974,316.

Patented Nov. 1, 1910.



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UNITED STATES PATENT OFFICE.

ANTONIO VIERA, OF RAY, ARIZONA TERRITORY.

MINER'S CANDLESTICK.

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To all whom it may concern:

Be it known that I, ANTONIO VIERA, a citizen of the Republic of Mexico, and a resident of Ray, in the county of Pinal and Territory of Arizona, have invented certain new and useful Improvements in Miners' Candlesticks, of which the following is a specification.

This invention relates to candle-sticks adapted especially for the use of miners, and has for its object the production of a device of this class, the various members of which may be locked together readily and as easily unlocked whenever it is desired to repair or sharpen any of the parts forming the completed candle-stick.

The invention consists primarily in providing the spike member with a longitudinal opening through which a lateral winged shank on the hook member is adapted to extend and engage the outer face of a spring projection on the candle socket,—the tension of said spring projection being sufficient to lock the three parts rigidly together.

The invention further consists in certain novel features of construction and arrangement of parts which will be understood readily by reference to the description of the drawing and to the claims hereinafter given.

Of the drawings Figure 1 represents a perspective view of a candle-stick for the use of miners, embodying the features of the present invention. Fig. 2 represents a plan of the same. Fig. 3 represents an elevation of a portion of the same, showing the means for locking the socket and hook members to the spike member, and Fig. 4 represents a perspective view of the socket member.

Similar characters designate like parts throughout the several figures of the drawings.

In the drawings, 10 represents a spike provided with a handle 11 preferably formed integrally therewith. The spike 10 is provided with a longitudinal slot 12 extending transversely thereof and in the same plane with said slot 12 one face of said spike 10 has a shallow groove 13 extending at right angles to said longitudinal slot. This groove 13 is of the same width as the width of the hook member 14, which it is adapted to receive when said hook member is in use.

The outer end of the member 14 is provided with a hook 15 by which the candle-

stick may be hung from any suitable projecting ledge or other member.

The member 14 is provided with a lateral shank 16, the outer end of which is provided with a plurality of winged projections 17, said projections being adapted to pass through a longitudinal slot 18 in a spring projection 19 formed upon the socket member 20. The shank 16 with its winged projections 17 thereon, is passed through the slot 12 in the spike portion and through the slot 18 in the socket portion 20 while the hook member 14 is in a position with its hook end extending toward the point of the spike 10, the spring projection 19 being compressed sufficiently during this operation to permit the winged projections 17 to pass through the opening 18 and to be turned so that the projections will engage the outer face of the spring projection 19. When this has been accomplished the tension of the spring 19 will hold the hook member 14 firmly against the face of the spike member 10, and when the hook member reaches the position shown in dotted lines at 21 on Fig. 1, the tension of the spring 19 will draw the hook member into the groove 13 and prevent its further movement about the axis of the shank 16 unless considerable force is applied thereto to flatten the spring 19 and permit the abutting shoulders of the hook member 14 and groove 13 to pass one another. This is done when it is not desired to use the hook 15 and the candle-stick is to be used by forcing the point of the spike 10 into a timber or some similar supporting member. When the candle-stick is thus used, the hook member is turned down into the position shown in full lines in Fig. 1 of the drawings. When in this position the wings 17 of the shank 16 will still be in engagement with the outer face of the socket member thus still locking the socket member and hook member to the spike.

The hook member 14 is provided with a cutting edge 22 adapted to co-act with a similar cutting edge 23 on the spike portion 10 when the hook member is moved about the axis of the shank 16,—these cutting edges 22 and 23 being for the purpose of cutting fuses.

The socket portion is peculiarly constructed of flat spring metal, the main portion of which is spirally wound to form a candle receiving pocket 24, the upper por-

tion of which is provided with an extending tongue 25 which may be pressed by the thumb of the operator to enlarge the candle receiving pocket 24 for the reception of a new candle or the displacement of the remains of a burned out candle.

The spring projection 19 is connected to the other end of the candle receiving portion by a reverse bend 26 having a bearing against the face of the spike 10, the opposite end of the spring member 19 being provided with an in-turned lip or ear 27 adapted to engage a notch or recess 28 in the face of the spike 10.

By this construction a candle-stick for the use of miners is produced having great strength,—the various parts of which may be readily locked together or separated from one another when any part becomes injured or unserviceable and it becomes necessary to repair or replace one of the parts or sharpen the hook or the point of the spike member.

It is believed that from the foregoing, the operation and many advantages of the invention will be fully understood without further explanation.

Having thus described my invention, I claim:

1. In a device of the class described, the combination of a spike provided with a handle integral therewith; a candle socket provided with a flat spring projection having a longitudinal slot therethrough; and a hook member provided with a winged shank adapted to pass through said spike and through the opening in said socket projection and lock said socket to said spike.

2. In a device of the class described, the combination of a spike provided with a handle; a candle socket provided with a flat spring projection having a longitudinal slot therethrough; a member pivotally mounted in said spike, and extending through said longitudinal opening; means for oscillating said member; and projections on said oscillating member adapted to normally lock said socket to said spike.

3. In a device of the class described, the combination of a spike provided with a handle; a candle socket provided with a flat spring projection having a longitudinal slot therethrough and an in-turned end engaging a depression in said spike; a member pivotally mounted in said spike and extending through said longitudinal opening; means for oscillating said member; and projections on said oscillating member adapted to normally lock said socket to said spike.

4. In a device of the class described, the combination of a spike provided with a handle; a candle socket provided with two flat spring projections, one of which under pressure is adapted to enlarge said socket for the reception of a candle, while the other

projection is provided with a longitudinal slot; a member pivotally mounted in said spike and extending through said longitudinal opening; means for oscillating said member; and projections on said member adapted to normally lock said socket to said spike.

5. In a device of the class described, the combination of a spike provided with a handle; a candle socket on one side thereof having a longitudinally-slotted spring projection; and a hook member on the other side of the spike provided with a shank which extends through said spike and slot and is provided with winged projections engaging the outer face of said spring projection to lock said socket to said spike.

6. In a device of the class described, the combination of a spike provided with a handle and a transverse groove in one face thereof; a candle socket on one side thereof having a longitudinally slotted spring projection; and a hook member on the other side of the spike and slot, provided with a shank which extends through said spike and slot and provided with winged projections engaging the outer face of said spring projection to lock said socket to said spike; said spring projection serving to move said hook member into said groove when at right angles to said spike.

7. In a device of the class described, the combination of a spike provided with a handle and having a longitudinal slot therethrough and a transverse groove on one face in the same plane with said slot; a hook member normally within said groove when in use provided with a shank extending through said slot and provided at its outer end with wing projections; and a candle socket having a spring projection provided with a longitudinal slot through which said shank passes to permit the winged projections thereon to co-act with the outer face of the spring projection and also provided with an ear extending into a depression in said spike.

8. In a device of the class described, the combination of a spike provided with a handle and having a longitudinal slot therethrough and a transverse groove in one face in the same plane with said slot; a hook member normally in said groove provided with a shank extending through said slot and having winged projections; and a spring interposed between said winged projections and said spike.

9. In a device of the class described, the combination of a spike provided with a handle and having a longitudinal slot therethrough and a transverse groove in one face in the same plane with said slot; a hook member normally in said groove provided with a shank extending through said slot and having winged projections; and a spring

interposed between said winged projections and said spike, said hook member and spike being provided with co-acting cutting edges.

10. In a device of the class described, the
5 combination of a spike provided with a handle and having an opening therethrough; a hook member on one side thereof; a candle socket on the other side provided with a
spring projection; and means extending
10 through said slot from said hook member and engaging said spring projection for nor-

mally locking said hook member and socket to said spike, but permitting the separation of said spike, hook member and socket when said hook member is moved into an abnormal position. 15

Signed by me at Ray, Arizona, this 22 day of January, 1910.

ANTONIO VIERA.

Witnesses:

WM. H. MAGEE,
GEO. L. THOMPSON.