

J. MAZLIN.
 PICK HEAD, USABLE WITH REMOVABLE POINTS.
 APPLICATION FILED FEB. 24, 1908.

899,455.

Patented Sept. 22, 1908.

Fig. 1

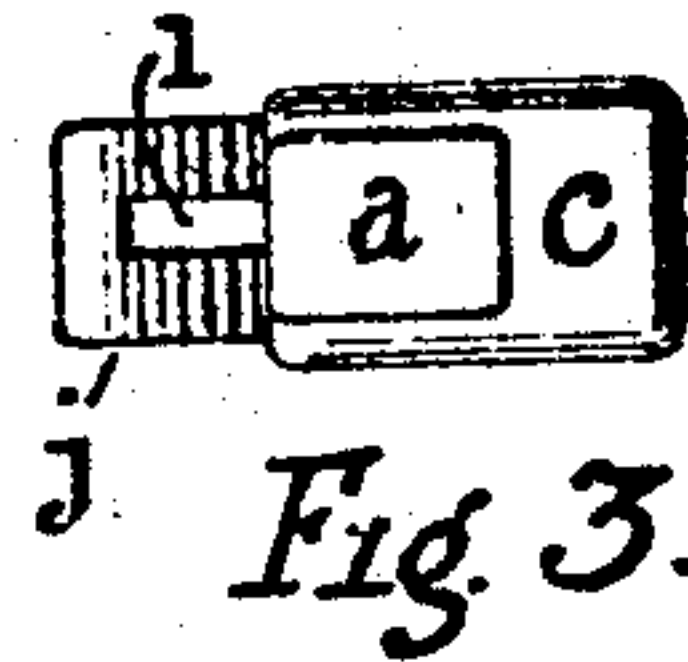
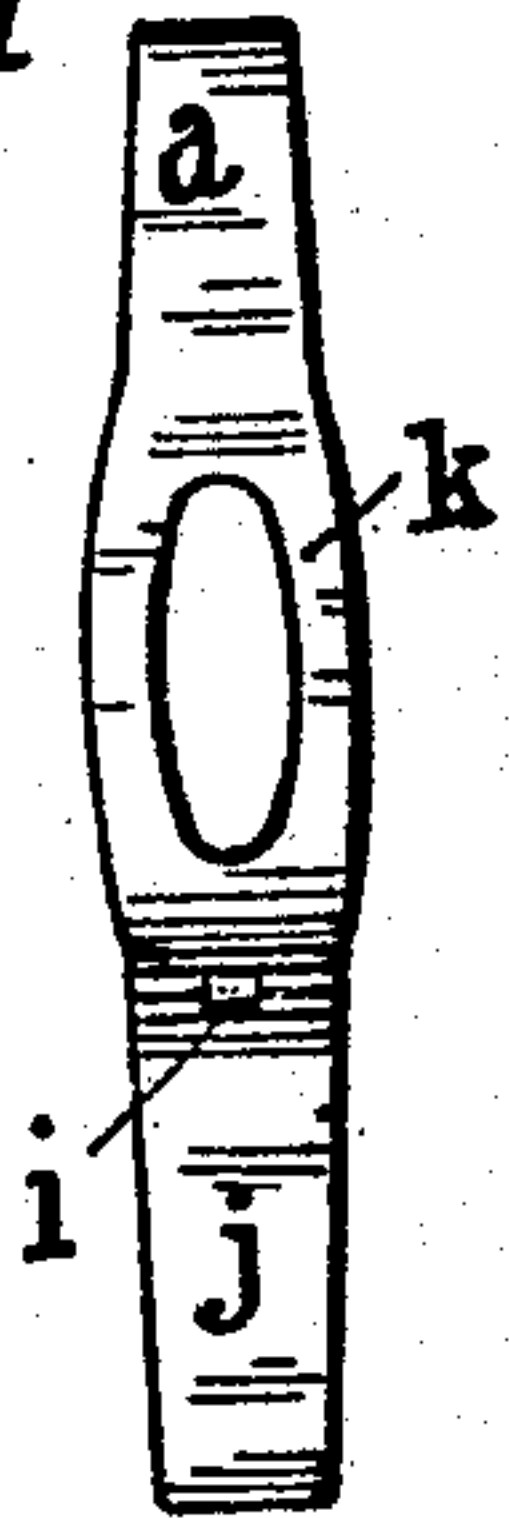


Fig. 3.

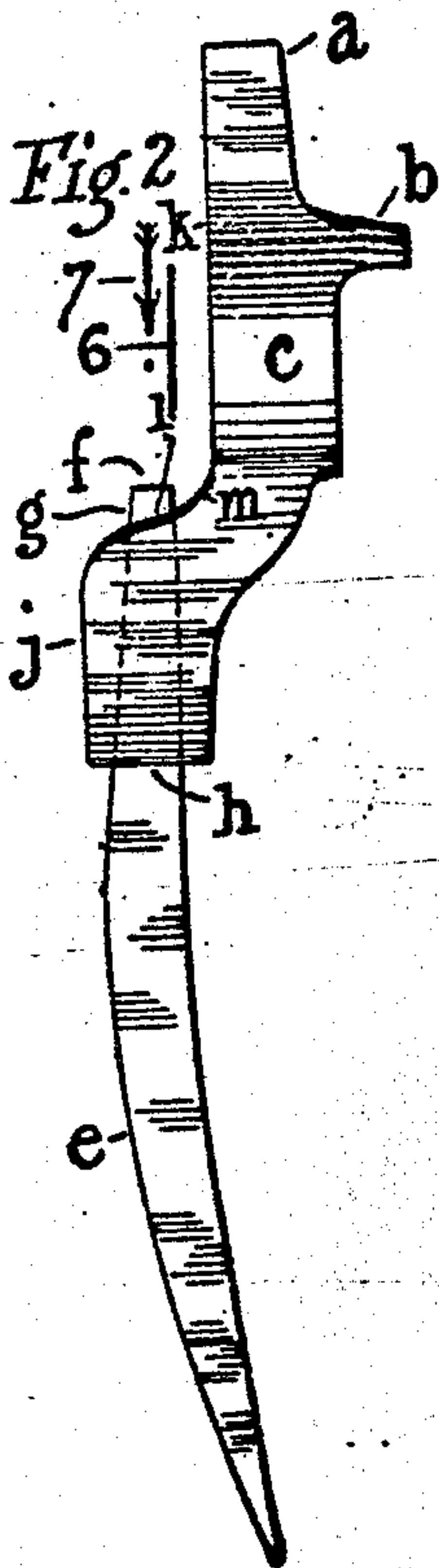


Fig. 2

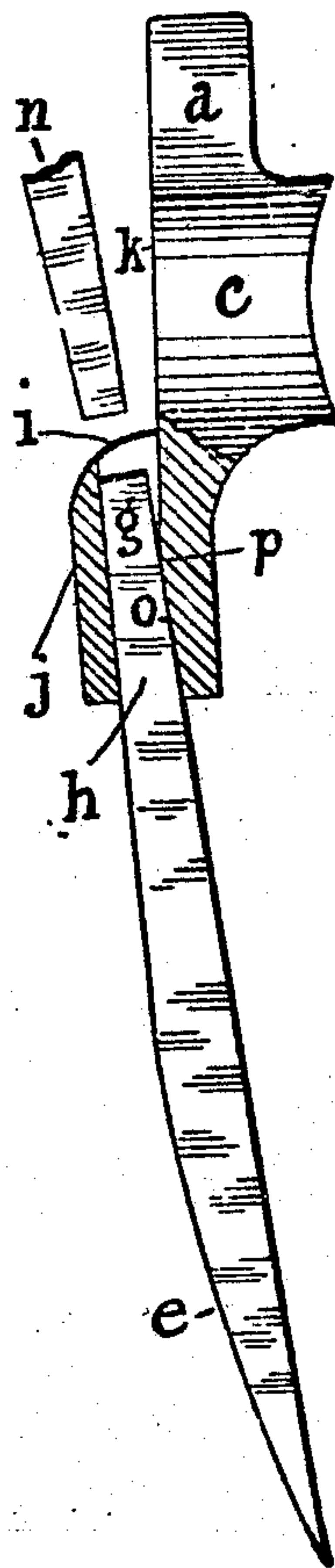


Fig. 4-

Witnesses

J. H. H. H.
Geo. F. Dwyer

Inventor

James Mazlin
 by *William M. H. H.*
 Attorneys

UNITED STATES PATENT OFFICE

JAMES MAZLIN, OF HERBERTON, QUEENSLAND, AUSTRALIA.

PICK-HEAD USABLE WITH REMOVABLE POINTS.

No. 899,455.

Specification of Letters Patent.

Patented Sept. 22, 1908.

Application filed February 24, 1908. Serial No. 417,535.

To all whom it may concern:

Be it known that I, JAMES MAZLIN, a subject of the King of Great Britain and Ireland, &c., residing at Herberton, in the State of Queensland, Commonwealth of Australia, have invented certain new and useful Improvements Relating to Pick-Heads Usable with Removable Points and the Like; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to those picks which have a head adapted to receive and hold securely a removable point or points (of drill steel for example) shaped to the requirements of the user.

Owing to pick points becoming blunt quickly, especially in navvying, mining, and military work, it is a saving of time and an avoidance of expense and inconvenience to be able to quickly substitute a new and sharp point. Picks receive exceptionally severe and sudden strains and shocks; they are used in dark places and by unskilled men; and to be of the desired practical value they must be extremely strong yet simple in construction, and their points must be extremely easy to remove yet not capable of being dislodged or loosened when they should remain fixed in their sockets. Sundry previous inventions introduce removable points, but have not all the advantages above mentioned; the present invention has them.

A pick head is used having an eye to receive a handle, and socketed to receive the shank of one, or the shanks of two points. When a worn or broken point is to be removed, the workman can take in hand the point to be substituted, and with one blow by it on the exposed rear of the shank of the point to be removed, he can immediately drive the latter out of its socket which completely surrounds the part of the shank it engages.

Details of this invention are indicated in the accompanying drawings, from which it will be observed that a separate rear wedge is usable as an auxiliary to hold a point in place though there are no holes in the pick head sides to weaken it. There is no slot along the top to become choked by rock or prove a source of weakness to the socket, or allow of the point being improperly loosened. The shank of the point is not limited in length,

and the socket being open at its front and rear ends only, a firm bearing surrounding a considerable length of the shank is thus provided.

Figure 1 shows in plan view a pick head having a socket for one point. Fig. 2 represents in side elevation the pick head of Fig. 1, fitted with a point of drill steel, or other suitable material which when worn can be readily sharpened. Fig. 3 is a rear end view of the pick head of Fig. 4. Fig. 4 is a side elevation, partly sectional, of a pick head, different in detail from Fig. 2, fitted with a point, for the removal of which a key is shown.

The pick head *c* has an eye, as illustrated, for the handle.

a is a hammer head, *b* a strengthening lug for the support of the handle, *e* the removable point, has a shank *g* with rear face *f*. The shank is tapered or so formed that it will wedge or be gripped tightly when forced into the socket or perforation *h*.

Head *c* at a predetermined distance from one or both ends of the handle eye, rises to form an ear or ears *j*, perforated longitudinally by a socket *h*, which has a rear opening *i* and is located at a higher level than the top of the handle eye. It is important that the handle top should be left visible, so that the handle end can project more or less from time to time as needed to fix it, and so that if the handle tends to loosen a tightening wedge or device can be readily inserted.

Shank *g* projects from hole *i*, and may project over or beyond the handle, even when the latter projects (as it often does in practice) above its eye, as—for example—up to line 6, Fig. 2. The shank projects (in some cases) from hole *i* some distance before reaching a point over the handle. If the handle projects so much above top edge *k* of head *c* as to come opposite hole *i*, shank *g* may still project visibly from that hole, and allow of easy removal. Part of rising ear *j* between edge *k* and hole end *i* is marked *m*. By giving a blow along line 7 Fig. 2 against end *f*, point *e* is removed.

When it be desired to more positively lock shank *g*, it is done at the rear part which projects from hole *i*. Thus a cotter is driven transversely through a hole *d* provided in the shank; this cotter will be always in sight, and can be inserted or left out at will, and it leaves socket *h* unaltered.

In Fig. 4 socket *h* has a base line *o* which

in some cases meets top k of head c so as to form an obtuse angle p . This angle is useful, whether shank g does or does not project from hole i ; when it projects, its upward inclination keeps it clear of top line k ; when it does not project, the removal of point e from the socket inclosing its shank is easy; as by a key or pin n (held at an angle to top k , as shown, or resting on said top—whichever is convenient—and driven in).

This invention is not limited to the designs of pick head and socket illustrated.

What I do claim as my invention and desire to secure by Letters Patent of the United States is:—

1. A pick head comprising an eye adapted to receive a handle for the pick; a hammer head integral with said pick head and extending in the plane of the top of the eye; and an ear also integral with said pick head, provided with a socket adapted to receive a

readily removable point of the pick, and said socket having a rear opening located in a plane beyond the top of said eye, substantially as described.

2. A pick head comprising an eye adapted to receive a handle for the pick; a hammer head integral with said pick head; a strengthening leg in addition to said eye for supporting said handle and extending at right angles to said hammer; and an ear also integral with said pick head, provided with a socket adapted to receive a readily removable point of the pick, and said socket having a rear opening located in a plane beyond the top of said eye, substantially as described.

In testimony whereof, I affix my signature in presence of two witnesses.

JAMES MAZLIN.

Witnesses:

ALF. PAIX,
E. J. STEWART.