No. 845,574. PATENTED FEB. 26, 1907.

A. C. PITMAN.

PICK.

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Fig. 1.

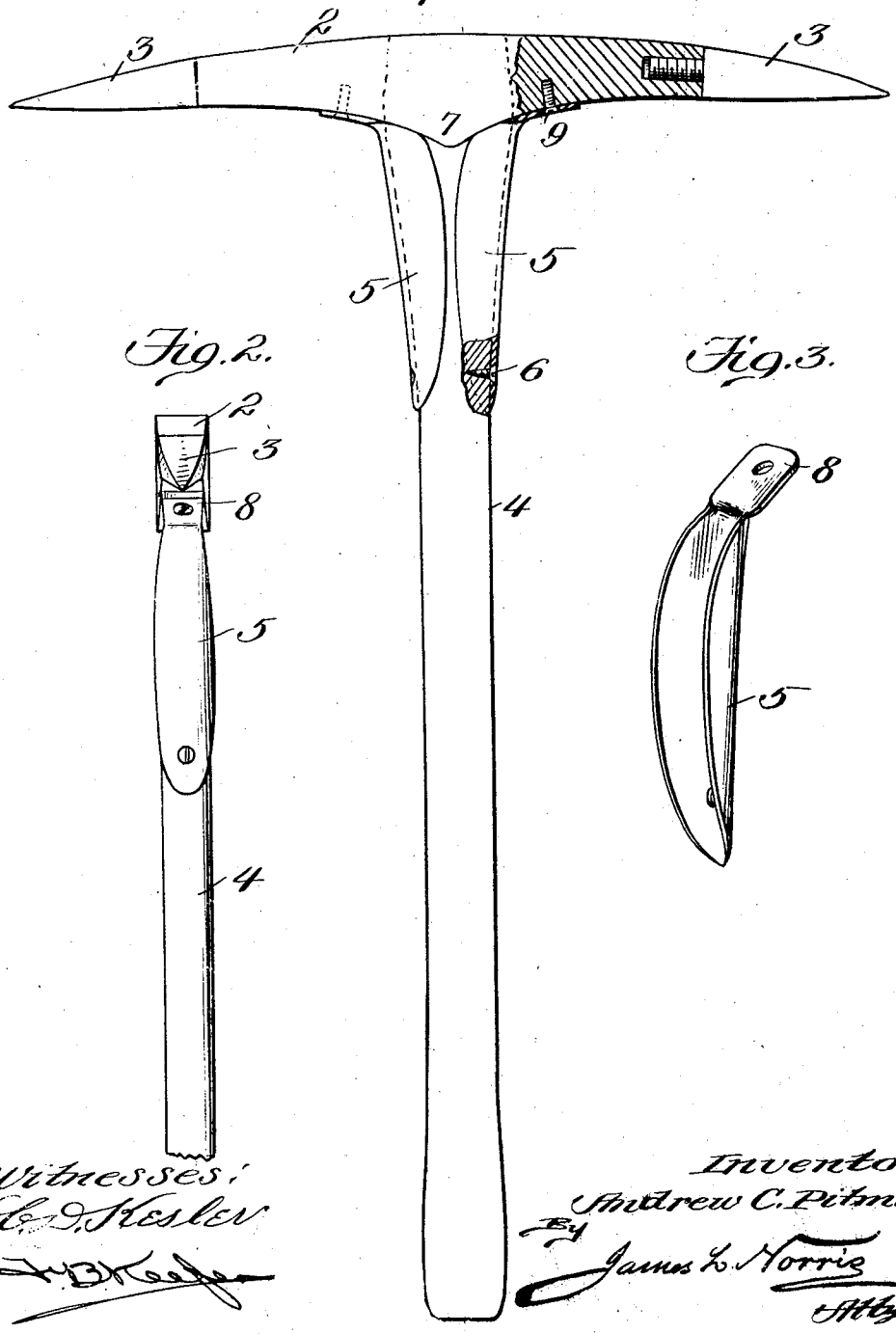

Fig. 2.

Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

ANDREW C. PITMAN, OF GARY, WEST VIRGINIA.

PICK.

No. 845,574. Specification of Letters Patent. Patented Feb. 26, 1907.

Application filed October 11, 1906. Serial No. 338,512.

To all whom it may concern:

Be it known that I, ANDREW C. PITMAN, a citizen of the United States, residing at Gary, in the county of McDowell and State of West Virginia, have invented new and useful Improvements in Picks, of which the following is a specification.

This invention relates to what I shall for convenience term a "pick." The invention, however, may be incorporated in other tools. It is of particular advantage, however, when employed in connection with a miner's pick. A device of this character comprises a blade and a handle, the latter being ordinarily of wood and its outer end or helve extending through an eye in the blade of the pick or pick proper. The handle adjacent the blade or pick proper is subjected when the tool is in use to an unusual amount of wear, so that said handle at such place is thinned down or becomes so reduced in size as to necessitate its removal from the blade, which is an operation requiring some time and labor. To prevent this wear, I provide at the place indicated a guard or protector, which effectually prevents undue wear upon the handle in proximity to the blade. This guard preferably consists of two channeled members embracing the handle and extending along the same from the blade to a suitable point. These two channeled members preferably consist of some metal, as malleable iron, and they are rigidly fastened to said handle, as by screws. The fact that the sides of these channeled members grip tightly the handle aids the screws in holding said guard members firmly in assembled relation with the handle. At the upper ends of the guard members are angularly-disposed ears or lugs diverging outwardly and which abut solidly against the under or inner surface of the blade. In addition to this the blade bears against the upper ends of the two guard members. I prefer to connect detachably these ears or lugs to the blade, and this result can be readily obtained by screws extending inwardly at an angle to the longitudinal axis of the blade. The blade, therefore, has in practice a solid bearing against the guard members and against the ears extending therefrom, so that should the wedges, which are ordinarily relied upon to hold the blade to the handle, become loosened the said guard members and ears, owing to their peculiar relation with the blade, will prevent absolutely vibratory motion of the latter with respect to the handle. The screws to which I have referred removably connect the guard members with the blade, so that such parts can be, when desired, separated and, owing to the fact that they are upon to slant or oblique, they cannot be readily dislodged when the implement is in use.

In the drawings accompanying and forming a part of this specification I show in detail one form of embodiment of the invention, which, to enable those skilled in the art to practice the same, will be fully set forth in the following description, while the novelty of said invention will be included in the claims succeeding said description.

Referring to said drawings, Figure 1 is a side elevation of a pick embodying my invention. Fig. 2 is an edge view of the same. Fig. 3 is a detail view in perspective of one of the guard members shown in the preceding figures.

Like characters refer to like parts throughout the several figures.

The implement shown in Figs. 1 and 2 of the drawings includes in its make-up a blade, as 2, this blade preferably consisting of a body, having at its ends removable points or tips, as 3, the latter having screws tapped directly into the said body. The latter is generally made of malleable iron or soft steel, while the removable points or tips 3 are preferably made of tool-steel. The materials from which these parts are made, however, is not of any importance, although those mentioned are found satisfactory. When the points 3 become dulled, they can be readily separated from the body of the blade 2 to be sharpened or ground. The blade 2 has centrally thereof an eye through which the helve of the handle 4 entirely passes, the handle being ordinarily made from wood.

It is one of the primary objects of the invention to prevent excessive wear of the said handle next the blade. As I have hereinbefore pointed out, it is found in practice that the handle adjacent the blade soon becomes worn through, thereby weakening the same to such an extent that it is of no value, so that it is necessary to remove the worn handle and replace the same with a new and perfect one. This is an operation which ordinarily requires some time. A common mode of accomplishing this result is to place the blade in a fire and burn out the handle. I overcome all this by providing means to prevent wear on the handle at the point indi-

cated, and this is where the maximum wear is put upon the handle by applying to such handle a guard or protector. This guard or protector is represented as consisting of two channeled members or plates, as 5, which tightly grip the handle. I do not rely upon this engagement between the plates and handle to hold the guard solidly in position, but assure this result by means of suitable fastenings, as screws 6, which extend through perforations in the two plates 5, near the outer or inner ends thereof, and which are driven into the wood of the handle. While the channeled plates are normally firmly held in position, and this is essential, they may, however, be removed by withdrawing the screws 6 for the purpose, when occasion requires, of separating the handle 4 from the blade 2.

The inner side of the blade 2 has centrally thereof a substantially angular inward or downward projection, as 7, the side faces of which converge at a point intersected by a plane disposed longi udinally of the handle 4. The angular sides of this projection 7 bear solidly upon the outer ends of the two guard members or channeled plates 5. The said guard members or channeled plates 5 have lugs or ears, as 8, extending outward angularly therefrom and diverging outward. These lugs or ears bear solidly against the under side of the blade. The blade, therefore, abuts not only against the guard members or plates 5, but against the ears or lugs 8 extending from said guard members, such bearing being on outwardly-diverging angular lines, so that should the wedges, which are normally relied upon to hold the blade 2 and handle 4 together, become loosened the blade cannot wabble nor move relatively to the handle, for the guard members and lugs will prevent any motion of the blade with respect to the handle, owing to the solid bearing pointed out. The ears or lugs 8 are preferably removably held against the blade 2 by suitable fastenings, as screws 9, which extend through perforations or holes in said ears and are tapped into the under side of the blade. These screws 9 are at a slant or oblique to the blade 2, and they converge outward so as to decrease the liability of their being bent when the pick is in use. In addition to this there is not so much liability of the screws being accidently loosened, as there would be were said screws to extend into the blade at right angles to the longitudinal axis of the latter. Owing to the bearing between the blade 2 and the channeled members 5 and their lugs 8, there is put upon the said screws no unusual stress. In other words, by virtue of such bearing relation the channeled members or plates 5 receive when the pick is in use the maximum thrust of the blade.

What I claim is—

1. In a pick, the combination of a blade having an inward projection on its inner side and an eye, a handle, the outer end of which extends through said eye, guard members of channeled form gripping the handle adjacent the blade and provided with angularly-disposed outwardly-diverging ears, said projection having angular inwardly-converging faces bearing solidly against the outer ends of the guard members and the ears bearing solidly against said angular faces, screws disposed at a slant and extending through said lugs into the body of the blade, and means for solidly and detachably connecting said guard members with said handle.

2. In a pick, the combination of a blade having an inward projection on its inner side provided with angular faces which converge inward and also having an eye, a handle, the outer end of which extends through said eye, guard members of channeled form gripping the handle adjacent the blade and provided with outwardly-diverging ears fitting flatwise against said converging faces, the projection between said ears bearing solidly against the outer ends of said channeled guard members, screws disposed at a slant, extending through the ears and tapped into the body of the blade, said screws converging outward, and screws extending through the outer ends of the guard members and fitted into the handle to detachably hold said guard members in solid relation with said handle.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ANDREW C. PITMAN.

Witnesses:
M. M. LOCKWOOD,
L. E. WOODS.