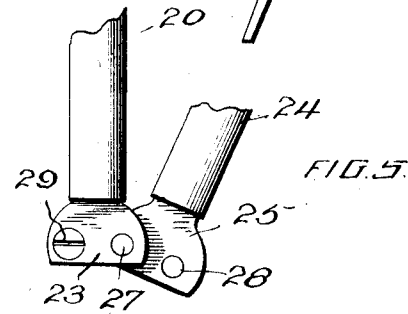
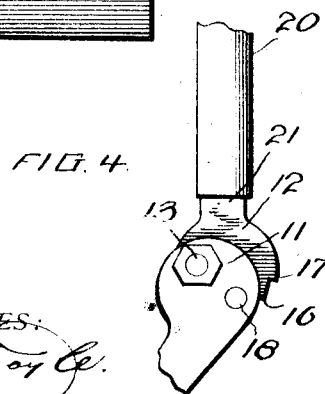
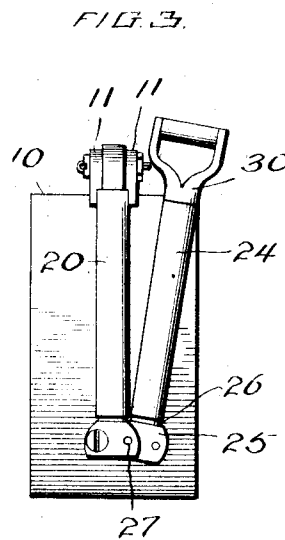
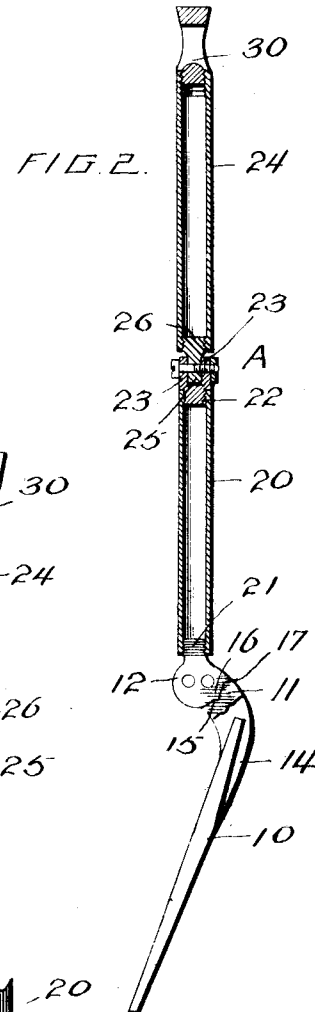
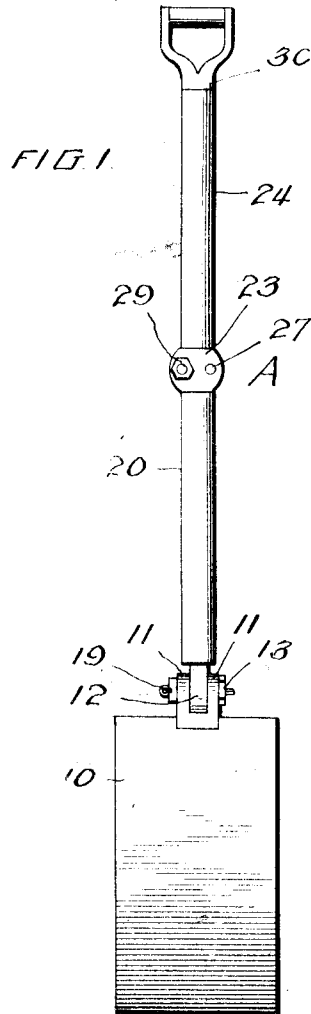


J. J. LINDELIEN.
 SPADE.
 APPLICATION FILED FEB. 23, 1912.

1,059,054.

Patented Apr. 15, 1913.



WITNESSES:
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UNITED STATES PATENT OFFICE

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SPADE.

1,059,054.

Specification of Letters Patent.

Patented Apr. 15, 1913.

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to all whom it may concern:

Be it known that I, JOHN J. LINDELIN, a citizen of the United States, residing at Battle Lake, in the county of Ottertail and State of Minnesota, have invented certain new and useful Improvements in Spades, of which the following is a specification.

This invention relates to spades, and has for its object to construct a spade adaptable particularly for use by prospectors and the like.

It has been found by experience to be a difficult matter to pack and transport a spade having a rigid and solid handle throughout its entire length, and it is the object of the present invention to overcome the objectionable features by providing a spade, the handle of which is constructed in sections, said sections being hinged together for the purpose of collapsing into a compact form when it is desired to pack the same for transportation purposes.

With the above and other objects in view, this invention consists in the construction, combination and arrangement of parts, all as will hereinafter be more fully described.

Figure 1 is a front elevation constructed in accordance with the present invention. Fig. 2 is a central longitudinal section taken through the handle. Fig. 3 is a front elevation illustrating the spade forming the subject matter of the present invention in a collapsed and folded position. Fig. 4 is a side elevation of the joint connecting the lower terminal of the handle to the body of the spade. Fig. 5 is a similar view illustrating the joint between the sections of the handle.

The construction forming the subject matter of the present invention comprises a spade having a pair of ears formed on the upper edge thereof, said ears having a section of handle pivoted thereto in such a manner that said sections when folded are adapted to rest against the forward face of the spade, as illustrated in Fig. 3. The handle is constructed in two sections, both joined between the handle and spade, said sections being hinged together in such a manner that when folded they will rest against one another.

Reference being had more particularly to the drawings, 10 indicates a spade of any suitable or standard construction, provided with a pair of outwardly extending ears or lugs 11, on its upper edge. These lugs or

ears 11 have a plate or disk 12 pivoted therebetween through the instrumentality of the bolt 13. The movement of this joint as above described is eccentrically about the bolt 13 in such a manner that when the handle of the spade is in its operative position as will be hereinafter more fully described, the periphery of the plate or disk 12 coincides and registers with the periphery of the ears or lugs 11. The lugs or projections 11 are formed upon a plate 14 which is secured to the rear face of the spade and extends thereabove. The inner wall 15 of the channel formed by the ears 11 is toothed for engagement with the teeth 16 and 17 formed upon the plate 12, as clearly illustrated in Fig. 2. This construction limits the movement of the spade 10 in one direction relative to the plate 12, but permits a free movement in the other direction. In order to provide a means whereby the joint may be rigidified, when the spade is in its operative position, the ears or lugs 11 and the disk or plate 12 are pierced by a series of openings 18 which are adapted to register, as illustrated in Fig. 2. A cotter pin 19 is then projected through the openings 18 thus rigidly connecting the joint between the handle and the spade.

The handle of the spade, designated generally as A, comprises a tubular section 20 which is interiorly threaded at its lower terminal to receive and engage the threaded stud 21, formed upon the disk or plate 12. The upper end of this section 20 which is the lower section of the handle, is likewise interiorly threaded for the reception of a stud 22 which has formed thereon, a pair of ears or projections 23 which are somewhat elliptical in elevation. The upper section 24 of the handle A is hinged between the ears 23 by means of a plate 25 which is retained in threaded engagement with the lower terminal of the section 24, by means of the stud 26. This plate conforms in contour with the ears 23 of the section 20, and is pivoted thereto by means of the pin 27, which pierces one terminal of the ears 23 and the plate 25. The opposite terminal of the plate 25 is pierced by an opening 28 which registers with similar openings, being pierced by a bolt 29, said bolt rigidly connecting the sections 20 and 24. The D grip 30 is threaded in the upper terminal of the section 24 and constitutes a means whereby the spade may operate.

From the foregoing it will clearly be seen that when it is desired to pack the spade forming the subject matter of the present invention, the bolt 29 is removed from the joint between the sections 20 and 24, and the section 24 is then folded downwardly upon the section 20, after which the cotter pin 19 is removed and the entire handle swung against the forward face of the spade 10.

10 Having fully described my invention, what I claim is new and desire to secure by U. S. Letters Patent, is—

1. A tool of the class described, comprising a blade having spaced ears extending 15 longitudinally from the upper edge thereof, the inner wall of the channel formed by said ears being toothed, a disk pivoted between said ears and having teeth for engagement with said toothed wall, means for locking 20 said disk against movement relative to the ears, and a handle carried upon said disk.

2. A tool of the class described, comprising a blade, a plate carried upon one edge of said blade, the plate being formed with 25 spaced ears, the inner wall of the channel formed by said ears being serrated, a disk pivoted between the ears and having a serrated edge for engagement with the serrated

wall to limit the movement of the blade relative to the disk in one direction, said ears 30 and disk being formed with openings, a cotter pin extending through said openings, and a handle member carried by the disk.

3. A tool of the character described, comprising a blade having spaced ears formed 35 on the inner edge thereof, a disk pivoted between said ears, a tubular handle section removably secured to said disk and adapted to swing forwardly against the outer face of the blade, means carried by the disk for 40 limiting the movement of the handle section in one direction, a stud threaded within the outer end of the handle section and formed with longitudinal ears, a plate pivotally secured between said ears, a second handle 45 section carried by said plate and adapted to swing laterally with respect to said first mentioned handle section, and means for locking said sections together.

In testimony whereof I affix my signature 50 in presence of two witnesses.

JOHN J. LINDELIEN.

Witnesses:

J. B. THOMPSON.

A. K. BONDY.