

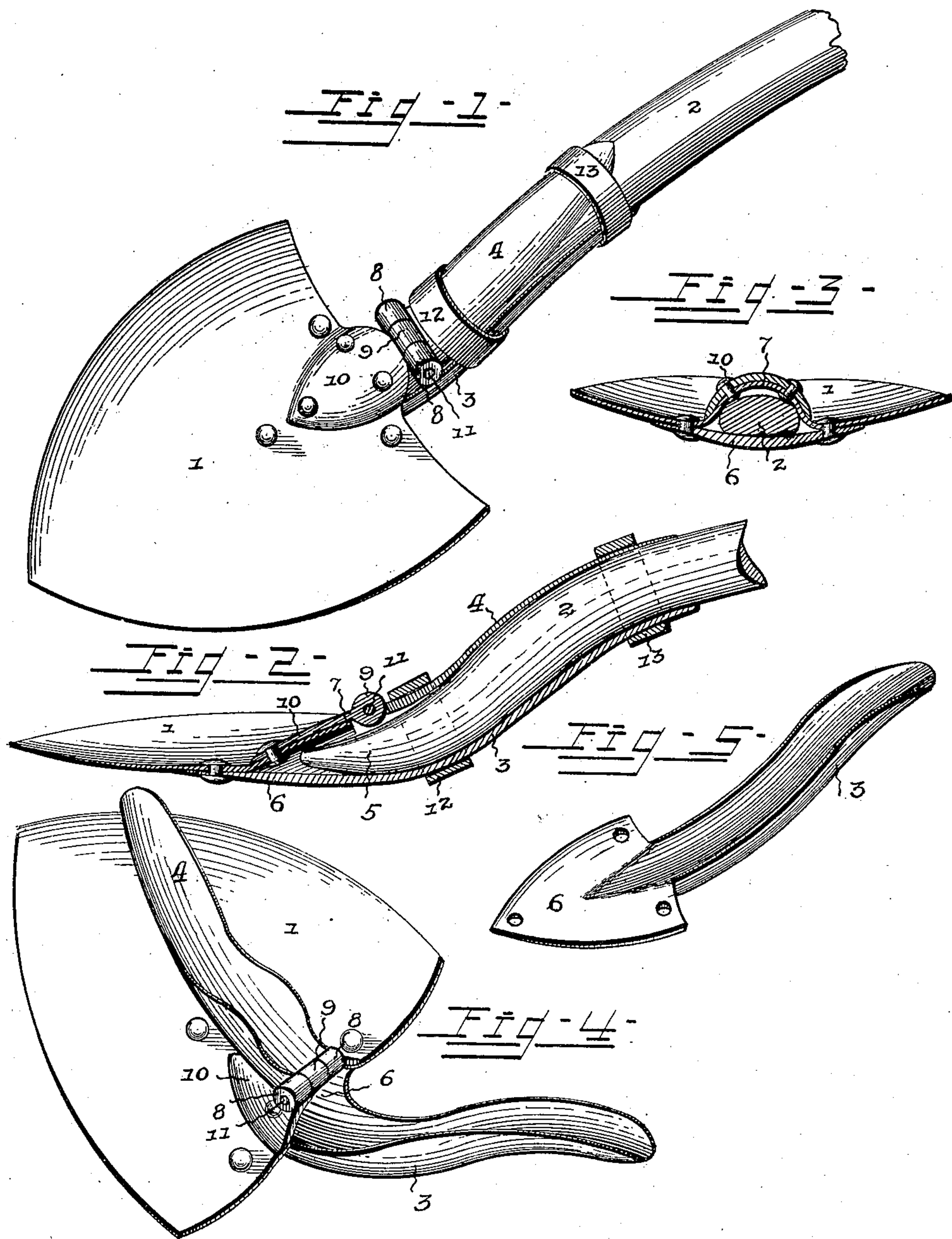
No. 620,493.

Patented Feb. 28, 1899.

J. B. PERKINS.
SHOVEL.

(Application filed May 13, 1898.)

(No Model.)



Witnesses:-

Q. J. Young
J. H. Riley

James B. Perkins, Inventor:-

By *His* Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES B. PERKINS, OF LEWISTON, IDAHO, ASSIGNOR OF TWO-THIRDS TO
COMMODORE B. NELSON AND HORACE NELSON, OF SAME PLACE.

SHOVEL.

SPECIFICATION forming part of Letters Patent No. 620,493, dated February 28, 1899.

Application filed May 13, 1898. Serial No. 680,599. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. PERKINS, a citizen of the United States, residing at Lewiston, in the county of Nez Perces and State of Idaho, have invented a new and useful Shovel, of which the following is a specification.

The invention relates to improvements in shovels.

10 The object of the present invention is to improve the construction of shovels and to provide a light, durable, and inexpensive one which will enable the handle, should it become broken, to be readily replaced by a new
15 handle and in which the devices for attaching the handle to the blade of the shovel will strengthen the former and not perforate or otherwise weaken it.

20 The invention consists in the construction and novel combination and arrangement of parts, as hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is a perspective view of a shovel constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail sectional view of the shovel, taken transversely of the socket and illustrating the
30 manner of attaching the members of the handle-socket to the blade of the shovel. Fig. 4 is a detail perspective view of the blade of the shovel, showing the socket open, the handle being removed. Fig. 5 is a detail view of the
35 rear or rigid member of the handle-socket.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

40 1 designates the blade of a shovel, secured to a handle 2 by means of a socket consisting of a rigid rear section or member 3 and a hinged front section or member 4, adapted to be opened, as illustrated in Fig. 4 of the accompanying drawings, to permit the handle
45 to be readily removed from and replaced in the socket. The end 5 of the handle, which is fitted in the socket, is curved, as shown, and the rear section or member 3, which is semicylindrical in cross-section, is curved to
50 conform to the bend of the handle and is provided with a tapering enlargement or plate

6, which is riveted or otherwise secured to the lower face of the blade of the shovel. The blade of the shovel is arched at 7 over the central portion of the plate or enlargement 6, and the end of the handle is received
55 between the plate and the blade, whereby a rigid support for the handle is provided.

The upper or front section or member 4 of the handle-socket is hinged to the blade of
60 the shovel at the top of the arched portion and is substantially semicylindrical in cross-section to conform to the configuration of the handle. The lower end of the front section or member 4 is provided with perforated ears
65 or lugs 8, arranged at opposite sides of a lug 9 of a plate 10 and connected to the said lug 9 by a pintle 11. The plate 10, which forms one of the leaves of the hinge, is concavo-convex in cross-section and is riveted or otherwise
70 secured to the arched portion 7 of the blade of the shovel.

The handle is detachably retained in the socket by means of collars or bands 12 and 13, located at the ends of the socket and adapted
75 to be moved inward on the handle to release the hinged member 4.

The invention has the following advantages: The shovel, which is simple and comparatively inexpensive in construction, is light and du-
80 rable, and the handle may be readily removed and renewed without removing rivets and without the use of tools necessary for handling such fastening devices. The handle-socket increases the strength of the handle
85 instead of weakening it, and in packing and carrying the shovel it is not necessary to carry a handle, as one can be readily supplied when it is desired to use the shovel.

Changes in the form, proportion, and minor
90 details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

1. In a device of the class described, the
95 combination of a blade, a handle-socket composed of a rigid section or member, and a hinged section or member adapted to be swung outward to open the socket for enabling the
100 handle to be readily placed therein and removed therefrom, and means for detachably connecting the sections or members, whereby

the handle is retained in the socket, substantially as described.

2. In a device of the class described, the combination of a blade, a handle, a socket
5 mounted on the blade and receiving the handle and composed of a rigid member, and a hinged member adapted to be swung outward to open the socket, and bands or collars encircling the handle and embracing the sections of the socket, substantially as described.
10

3. In a device of the class described, the combination of a blade having an arched portion 7, the rigid member of the socket provided with an enlargement or plate secured
15 to the lower face of the blade and extending beneath the arched portion 7, a handle fitting

against the rigid member of the socket and having one end interposed between the arched portion of the blade of the shovel and the plate or enlargement, the movable section of the socket hinged to the blade at the top of the arched portion, and means for detachably connecting the sections of the socket, substantially as described.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

JAMES B. PERKINS.

Witnesses:

JOHN W. O'NEILL,
ELISHA M. MARTIN.