

No. 754,543.

PATENTED MAR. 15, 1904.

J. CHRISTIANSEN.
SHOVEL AND FOOT PROTECTOR.
APPLICATION FILED NOV. 11, 1903.

NO MODEL.

Fig. 1.

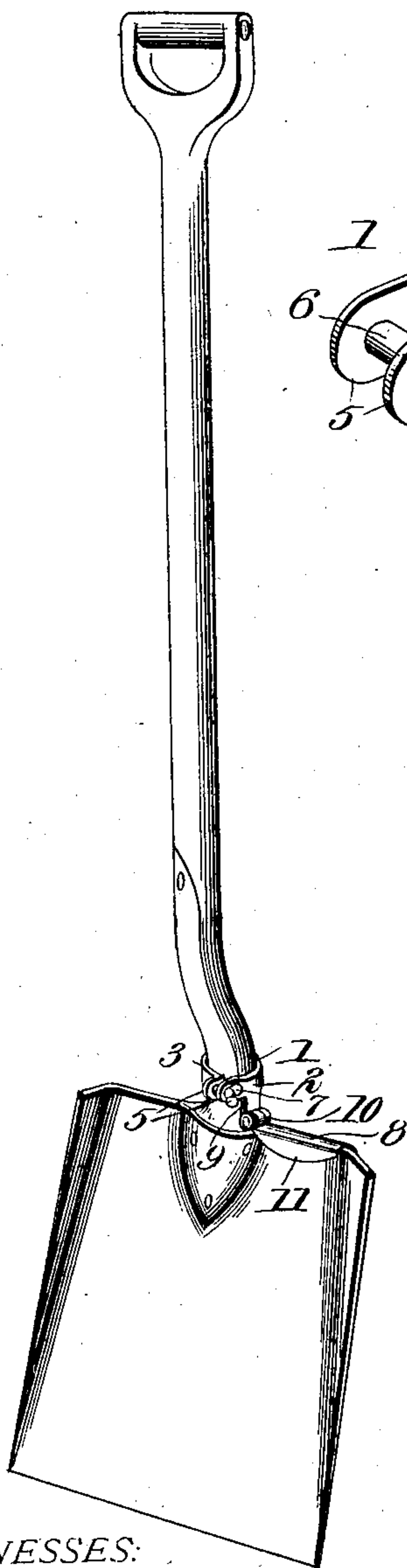


Fig. 2.

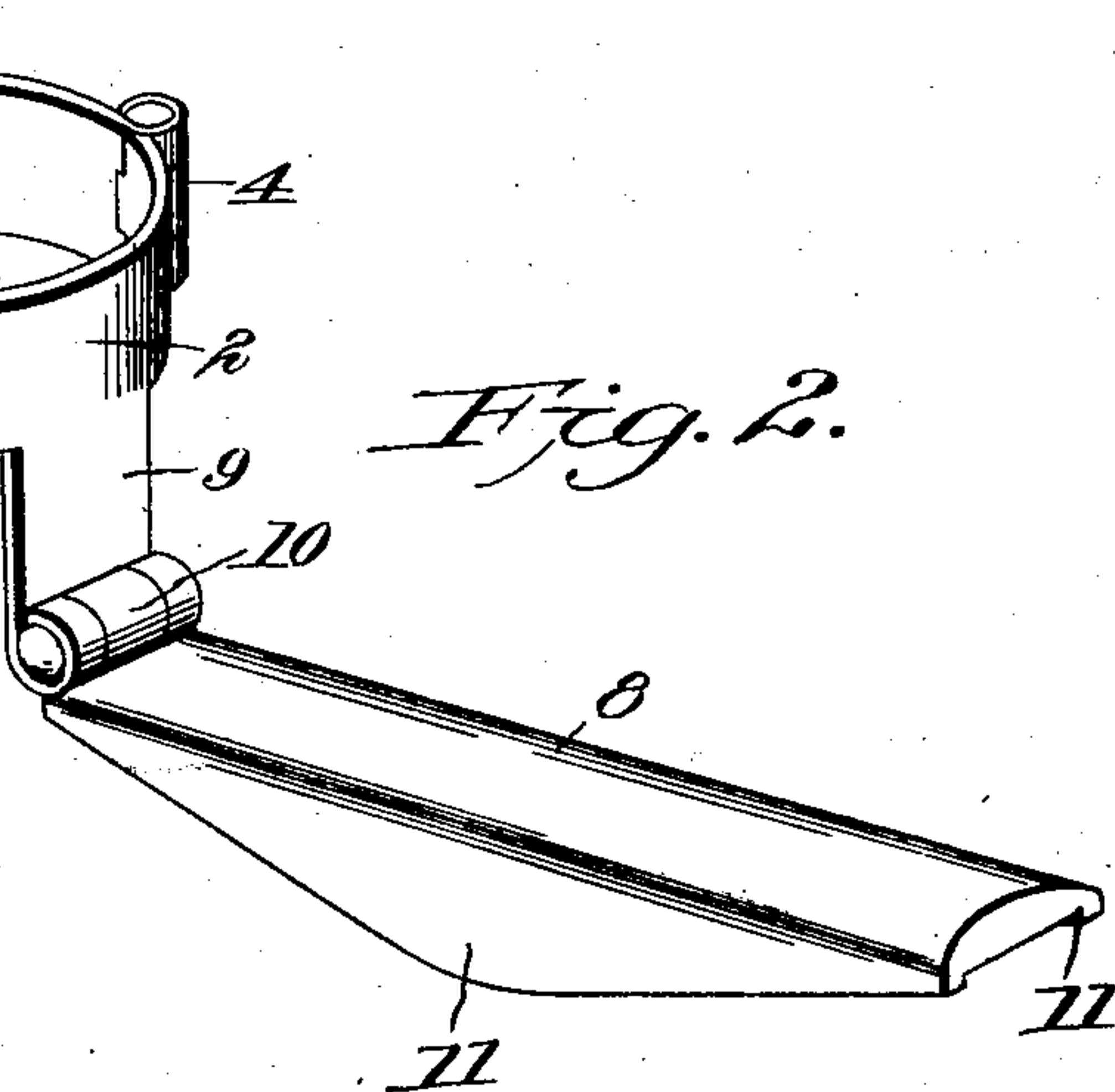
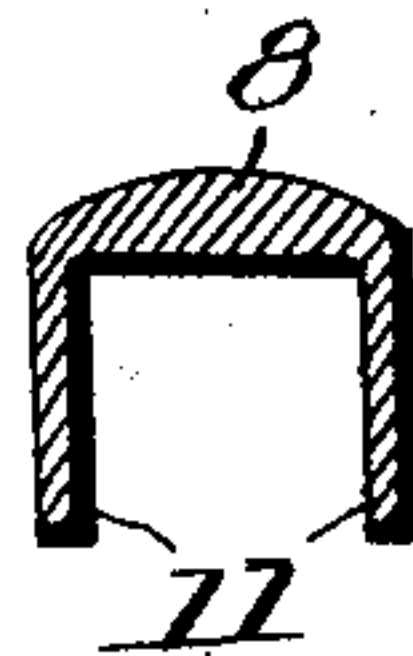


Fig. 3.



WITNESSES:

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JOHN CHRISTIANSEN, OF CEDARFALLS, IOWA.

SHOVEL AND FOOT PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 754,543, dated March 15, 1904.

Application filed November 11, 1903. Serial No. 180,772. (No model.)

To all whom it may concern:

Be it known that I, JOHN CHRISTIANSEN, a citizen of the United States, residing at Cedarfalls, in the county of Black Hawk and State of Iowa, have invented a new and useful Shovel and Foot Protector; 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.

The invention relates to improvements in shovel and foot protectors, and has for its object to provide a simple, inexpensive, and efficient device of this character adapted to be applied to a shovel or spade and capable of strengthening the same and of preventing the foot from being injured by the latter.

A further object of the invention is to provide a shovel and foot protector which when shoveling loose dirt or in cleaning the shovel may be readily removed from the blade of the latter without detaching it from the shovel.

With these and other objects in view the invention consists in the construction and novel arrangements of parts hereinafter described and shown, and particularly pointed out in the appended claims.

In the drawings forming part of this specification, and in which like numerals of reference designate corresponding parts, Figure 1 is a perspective view of a shovel provided with a device constructed in accordance with this invention. Fig. 2 is an enlarged detail perspective view of the device. Fig. 3 is a detail sectional view.

Referring to the drawings, 1 designates a clamp or collar, composed of semicircular sections 2 and 3, connected at the back by hinge 4 and provided at the front with perforated ears 5, receiving a clamping-bolt 6, which is provided with a thumb-nut 7; but the clamp or collar may be reversed to arrange the adjusting device at either the front or the back, whereby a foot-piece 8 may be disposed at either side of the shovel. The clamp or collar is adapted to firmly embrace the handle of the shovel, and the section 2 is provided with a depending arm or extension 9, adapted to lie against the handle and having the inner end of the foot-piece 8 connected to it by

hinge-joint 10, preferably consisting of aligned eyes and a pintle passing through the same and permitting the foot-piece to be swung upward out of the way, for a purpose hereinafter explained. The perforated ears may be constructed in any desired manner, and the thumb-nut of the bolt is provided with wings to enable the nut to be readily rotated, whereby the clamp may be secured to the handle as tightly as desired.

The foot-piece 8, which is half round to present a smooth upper convex face, is arranged on the upper edge of the blade of the shovel at one side of the handle, and preferably extends from the handle to the adjacent outer edge of the blade; but it may be of any desired length, as will be readily understood. The foot-piece is provided with a pair of depending approximately triangular flanges 11, which receive and tightly embrace the upper portion of the shovel, whereby the blade is reinforced, strengthened, and prevented from breaking at the point where the pressure is applied.

The foot-piece will remain in an approximately horizontal position on the blade by gravity and the clamping action of the depending flanges. The hinged joint 10 will permit the foot-piece to be swung upward against the handle when it is desired to use the shovel in loose soil and for any other purpose, and this operation will facilitate the cleaning of the shovel and the foot-piece of any accumulation that may accumulate on them.

It will be seen that the device is simple, strong, and durable, that it may be readily applied to or removed from a shovel, and that it not only strengthens a shovel, but prevents a boot or shoe from being injured by the shovel.

What I claim is—

1. A device of the class described, provided with a hinged foot-piece fitted against the blade of a shovel and adapted to swing upward therefrom, substantially as described.

2. The combination with a shovel of a clamp for engaging the handle of the shovel, and a foot-piece hinged to the clamp and arranged to fit against the upper edge of the blade of the shovel, substantially as described.

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3. The combination with a shovel of a clamp
composed of hinged sections and provided
with an adjusting device, and a foot-piece ar-
ranged to fit against the upper edge of the
5 shovel and hinged to the clamp, substantially
as described.

4. The combination with a shovel of a clamp
for engaging the handle of the shovel, an arm
extending from the clamp, and a foot-piece

hinged to the arm and provided with flanges 10
embracing the blade of the shovel, substan-
tially as described.

In testimony whereof I have hereto affixed
my signature in the presence of two witnesses.

JOHN CHRISTIANSEN.

Witnesses:

CARL M. LORENZEN,
S. P. BAILEY.