

No. 702,097.

Patented June 10, 1902.

J. F. HAVILAND.
SHOVEL.

(Application filed Mar. 27, 1902.)

(No Model.)

Fig. 1.

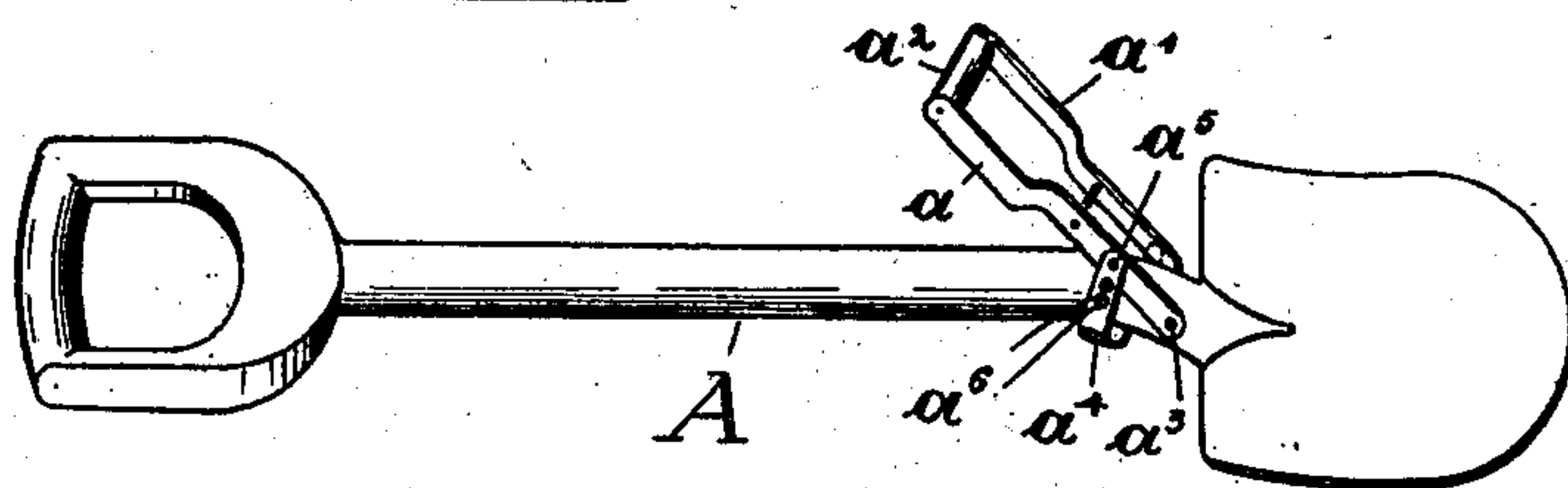
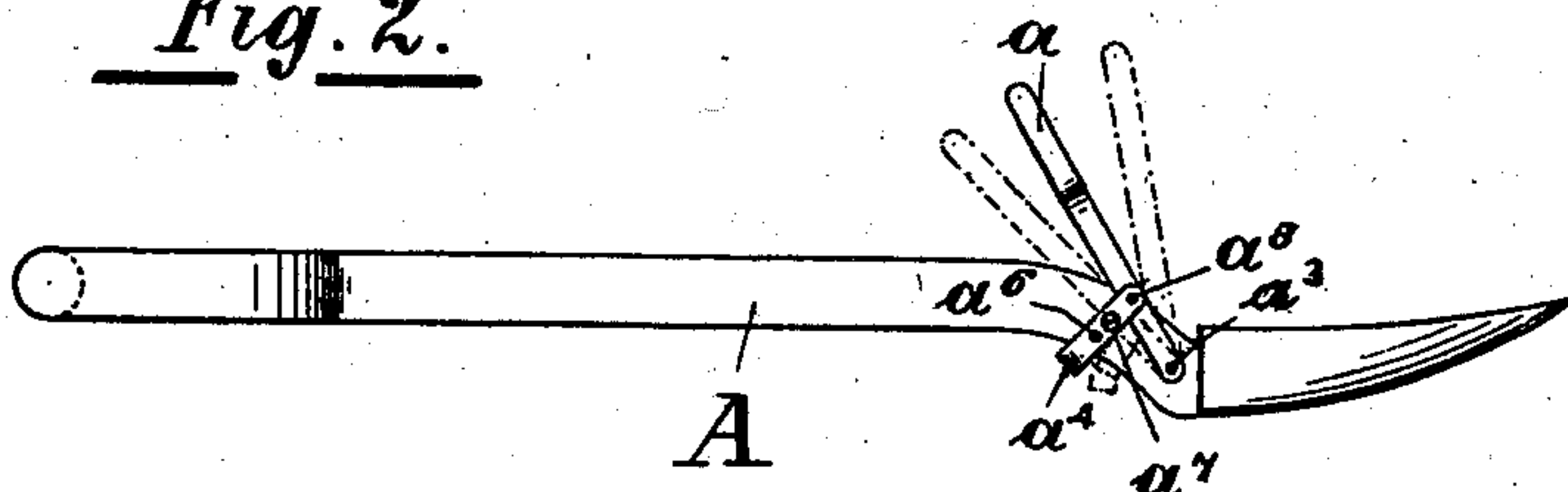


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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SHOVEL.

SPECIFICATION forming part of Letters Patent No. 702,097, dated June 10, 1902.

Application filed March 27, 1902. Serial No. 100,174. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. HAVILAND, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Shovels, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in shovels, and more particularly to an auxiliary adjustable and detachable handle adapted to be attached to implements of the class named, whereby manual labor is made less fatiguing by relieving the strain on the arm and back of the laborer, and thus enabling him to husband his strength and to perform more work. These are some of the objects of my invention. Further objects are to enable the laborer to work in a narrow trench, to give him a greater swing, and to throw the material manipulated a greater distance. These objects I accomplish with my invention, which consists of an auxiliary handle having two extended side portions, the lower ends of which are pivotally secured to the handle-bar, one on each side thereof near the blade, a U-shaped stop-yoke or rest having openings in each side thereof which register those on one side with those on the other side and adapted to pass around the handle-bar upwardly, the ends thereof being secured to the sides of the auxiliary handle a suitable distance above the ends thereof to limit the upward movement of said handle, and a pin adapted to be passed through the openings in the U-shaped yoke and through the handle-bar when it is desired to hold the auxiliary handle rigidly at any particular angle with relation to the handle-bar.

My invention is illustrated in the accompanying drawings, in which similar letters of reference indicate like parts in the figures thereof, and in which—

Figure 1 shows a shovel with my invention applied thereto and the construction thereof; and Fig. 2 is a side view of the same, showing it secured to the handle-bar by a pin passed through the sides of the U-shaped yoke and through the handle-bar in the position shown by the solid lines, the dotted lines

showing the different positions in which the auxiliary handle may be rigidly secured.

If preferred, the securing-pin need not be passed through the handle-bar and U-shaped yoke, in which case the auxiliary handle will not be rigid but will swing on its pivot; to which it is secured to the handle-bar. The use or non-use of the said securing-pin will be a matter to be determined by the laborer, according to the character of the work being performed.

It is obvious that my invention may be applied to many working implements, and it is not deemed necessary to mention all.

A represents a handle-bar of a shovel or like implement; a , a' , and a^2 , the sides and top, respectively, of my auxiliary handle, the sides of which are connected by a slender rod which will rest on the top of the handle-bar when the securing-pin a^7 is withdrawn, permitting the auxiliary handle to fall. The ends of my auxiliary handle are pivotally secured to the handle-bar A by the pivot a^3 , and the U-shaped stop-yoke is secured to the sides of the auxiliary handle by the rivets a^5 or in any other suitable manner. To secure the auxiliary handle rigidly in a desired position, the securing-pin a^7 is passed through the necessary openings a^6 in the U-shaped stop-yoke a^4 and through the handle-bar A, as shown in Fig. 2. When shoveling in the ordinary way, the hand which grasps the lower portion of the handle-bar is turned in such a manner as to twist the arm, thus interfering with the muscles and to a great extent depriving the laborer of the full power of his arm, the back has to be bent, and the strain on one side of his body is greater than on the other. My invention does away with this unequal strain and its consequent fatiguing of the twisted arm and tired back by enabling the laborer to hold the auxiliary handle without turning his wrist and arm, to let his arm hang at full length in its natural position, by lessening the height of the lift, and giving a full swing to both arms in throwing the contents of the shovel or other implement.

With this description of my invention, what I claim, and desire to secure, is—

1. An auxiliary handle, adapted to be piv-

otally secured to the handle-bar of a shovel, near the blade, and provided with a U-shaped stop-yoke depending therefrom and passing down and under the handle-bar, substantially as set forth.

2. An auxiliary handle, adapted to be secured pivotally above the handle-bar proper of a shovel, and a U-shaped yoke rigidly secured to and depending from the sides of said handle, above the point of pivotal connection, and passing down under said handle-bar to form a support therefor, and means for locking said U-shaped yoke at various points to such a handle-bar, substantially as set forth.

3. In a shovel, a handle-bar and blade, in combination with an auxiliary handle above said handle-bar and pivotally secured thereto, near the blade, and a U-shaped yoke having openings in the sides thereof, rigidly secured to and depending from the sides of said

handle above the point of pivotal connection and passing down under the handle-bar, an opening passing laterally through the handle-bar and a pin adapted to pass through said opening and the openings in the sides of the U-shaped yoke to lock the handle-bar, rigidly when required, in a desired position in said yoke, substantially as set forth.

4. In a shovel, the combination with the handle-bar thereof, of an auxiliary handle, adapted to be secured rigidly, or pivotally, thereto, and means for locking said auxiliary handle at various angles in relation to the handle-bar, substantially as set forth.

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

JAMES F. HAVILAND.

Witnesses:

ROBERT H. FORDYCE,
JOHN F. KERR.