

(No Model.)

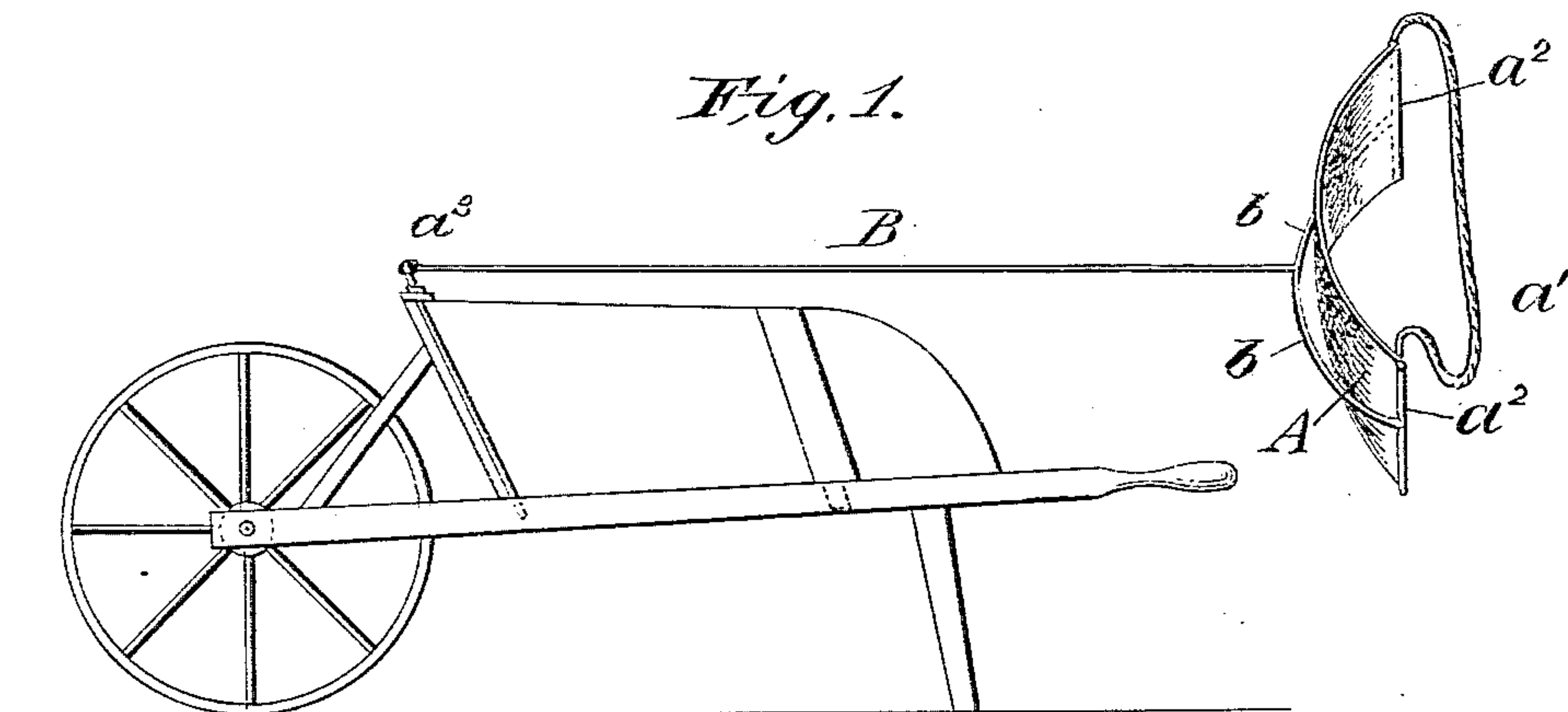
S. F. CRULL.

PROPELLING ATTACHMENT FOR GARDEN PLOWS.

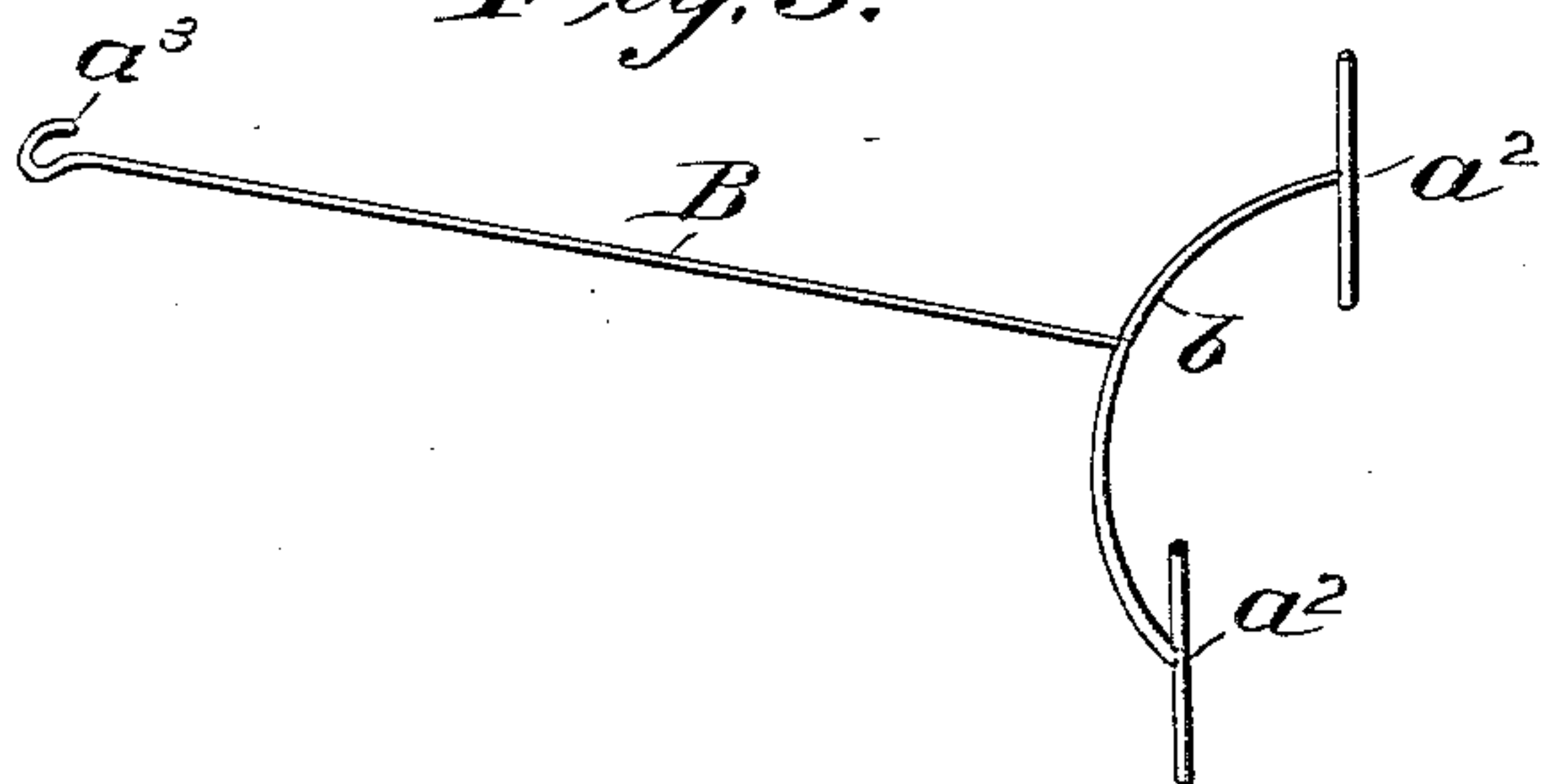
No. 504,712.

Patented Sept. 12, 1893.

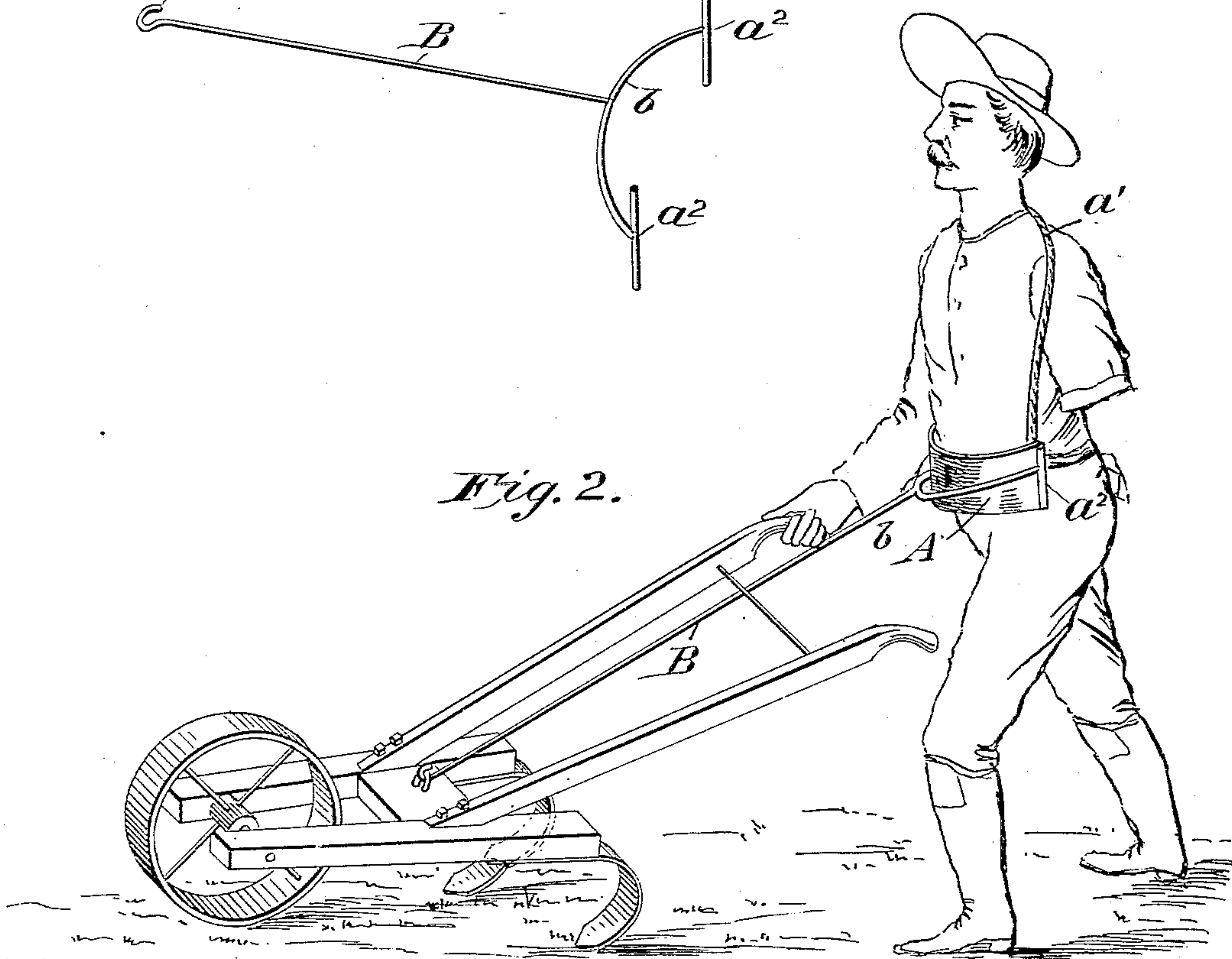
*Fig. 1.*



*Fig. 3.*



*Fig. 2.*



Witnesses

John W. Hull  
J. H. Stuffy

Inventor.

Solomon F. Crull,  
By Phil South,  
Attorney.

# UNITED STATES PATENT OFFICE.

SOLOMON F. CRULL, OF DUBLIN, INDIANA.

## PROPELLING ATTACHMENT FOR GARDEN-PLOWS.

SPECIFICATION forming part of Letters Patent No. 504,712, dated September 12, 1893.

Application filed May 19, 1893. Serial No. 474,808. (No model.)

*To all whom it may concern:*

Be it known that I, SOLOMON F. CRULL, a citizen of the United States, residing at Dublin, Wayne county, Indiana, have invented a new and useful Improvement in Propelling Attachments for Garden-Plows, Lawn-Mowers, Wheelbarrows, &c., of which the following is a specification.

My invention relates to improvements in propelling devices, as an attachment for wheel-garden plows, cultivators, lawn-mowers, wheel-barrows, and other implements which are ordinarily pushed by the handles, by or with the hands.

The object of my device is to supply an attachment, by means of which the propelling power is largely removed from the arms, and is placed against the hips, and I attain the object sought by the mechanism illustrated in the accompanying drawings, in which—

Figure 1. is a view showing my device as attached to an ordinary wheelbarrow. Fig. 2. is a view showing the manner of attaching to a wheel, hand garden plow. Fig. 3. is a view of my attachment, with stomach pad A, removed.

Similar letters refer to similar parts throughout the several views.

In its construction I prefer to use a metal bar or rod B, with circular frame  $b$ , provided with curved side or hip pieces  $a^2$ , and hook  $a^3$ , or other simple device for attaching to the implement to be used.

To the curved side pieces  $a^2$ , of the circle  $b$ , I make fast, in any suitable way, a pad A, made of any kind of flexible material, as cloth or leather. This pad is made of proper length, so that when in use it will encircle the stomach of the user, without pressing against the stomach, as shown in Fig. 2. A strap  $a'$ , to each side of the top ends of the curved side or hip pieces  $a^2$ , as shown in Fig. 1, is intended to be thrown over the shoulders, around the neck, to support the pro-

PELLER in position. It will be seen in Fig. 2, that the circle,  $b$ , does not rest against the pad A. nor does the pad A. rest, or press against the stomach. The pressure or draft is against the sides of the hips of the user, the curved pieces  $a^2$ , adjusting themselves to the hips. In its operation as a propeller, the object is to relieve the strain largely from the arms and hands, and place it against the hips, where the operator will scarcely feel that he is exerting any more labor than in walking, and he has the free use of his arms and hands to guide the implement by the handles.

A person with but one arm can use my device almost as easily as the person with two arms.

In securing my attachment to other implements, besides those illustrated in the drawings, all that is needed is an eye, or a swivel as in the case of a dumping wheel-barrow. Here the attachment can be made fast to the end of the barrow bed or frame.

I am aware that a pushing device, operated from the breast, and in combination with a wheel is in use. Therefore I do not broadly claim originality, but

What I do claim as my invention, and desire to secure by Letters Patent, is—

An attachment for garden plows, cultivators, lawn mowers, wheel barrows, and similar implements, as a propelling device, having a main bar or rod B, provided with hook or swivel end  $a^3$ , circular shaped piece  $b$ , provided with curved upright hip pieces  $a^2$ , flexible stomach piece A, secured to the tops of the hip pieces a strap  $a'$  for supporting the propeller, all in combination, substantially as and for the purpose set forth.

SOLOMON F. CRULL.

Witnesses:

NELLIE CRULL,  
ELIZBH. TLETHER.