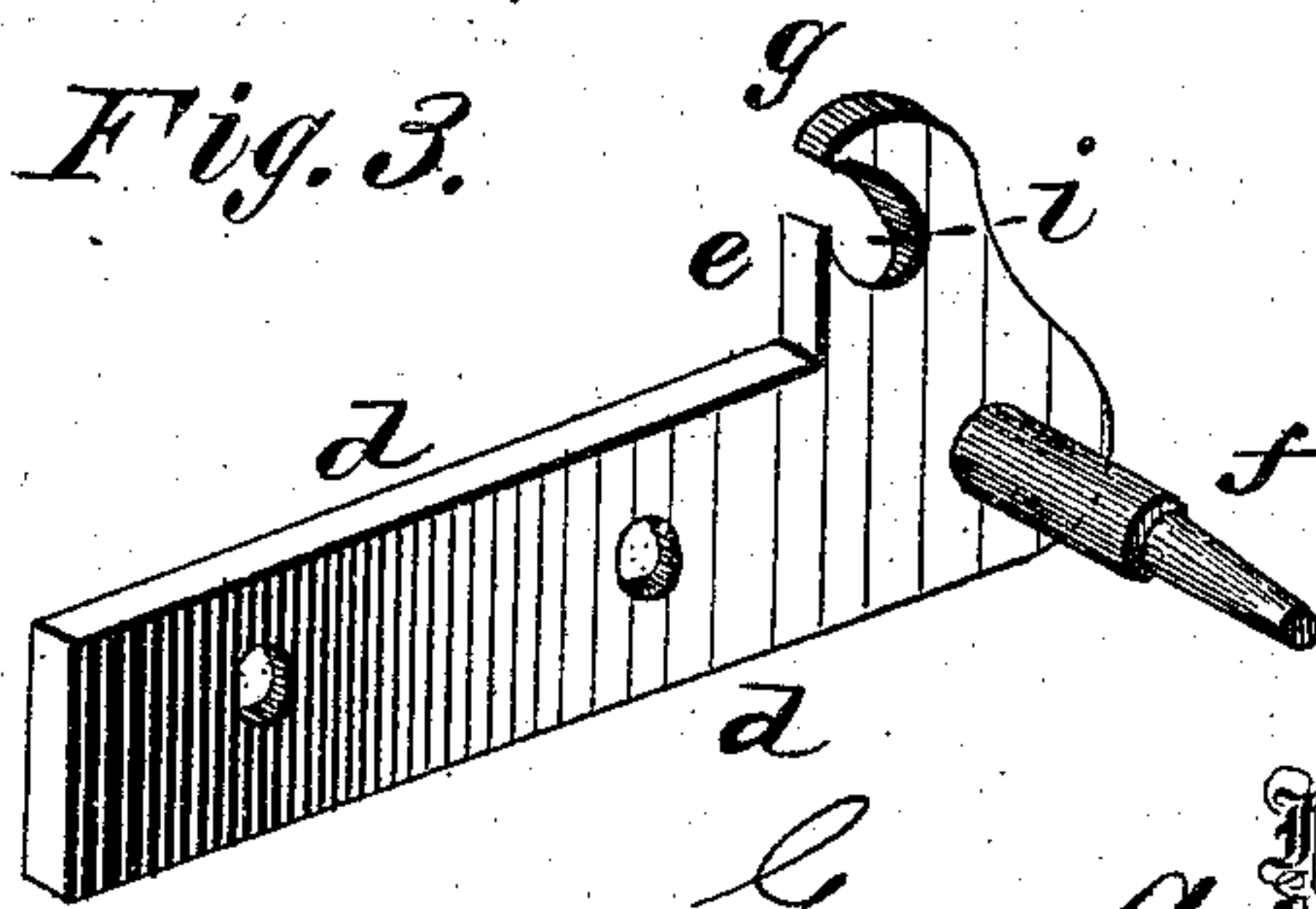
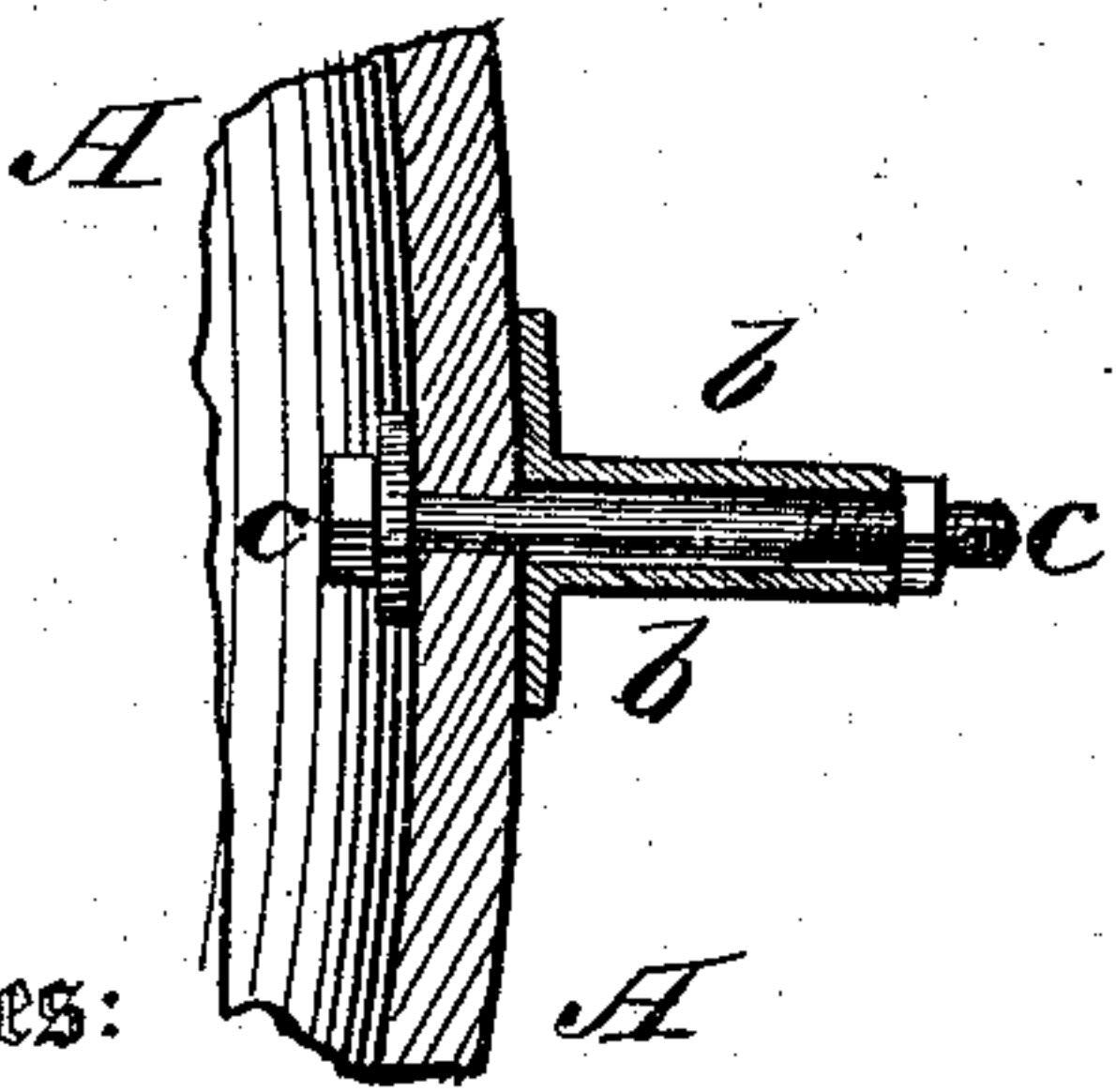
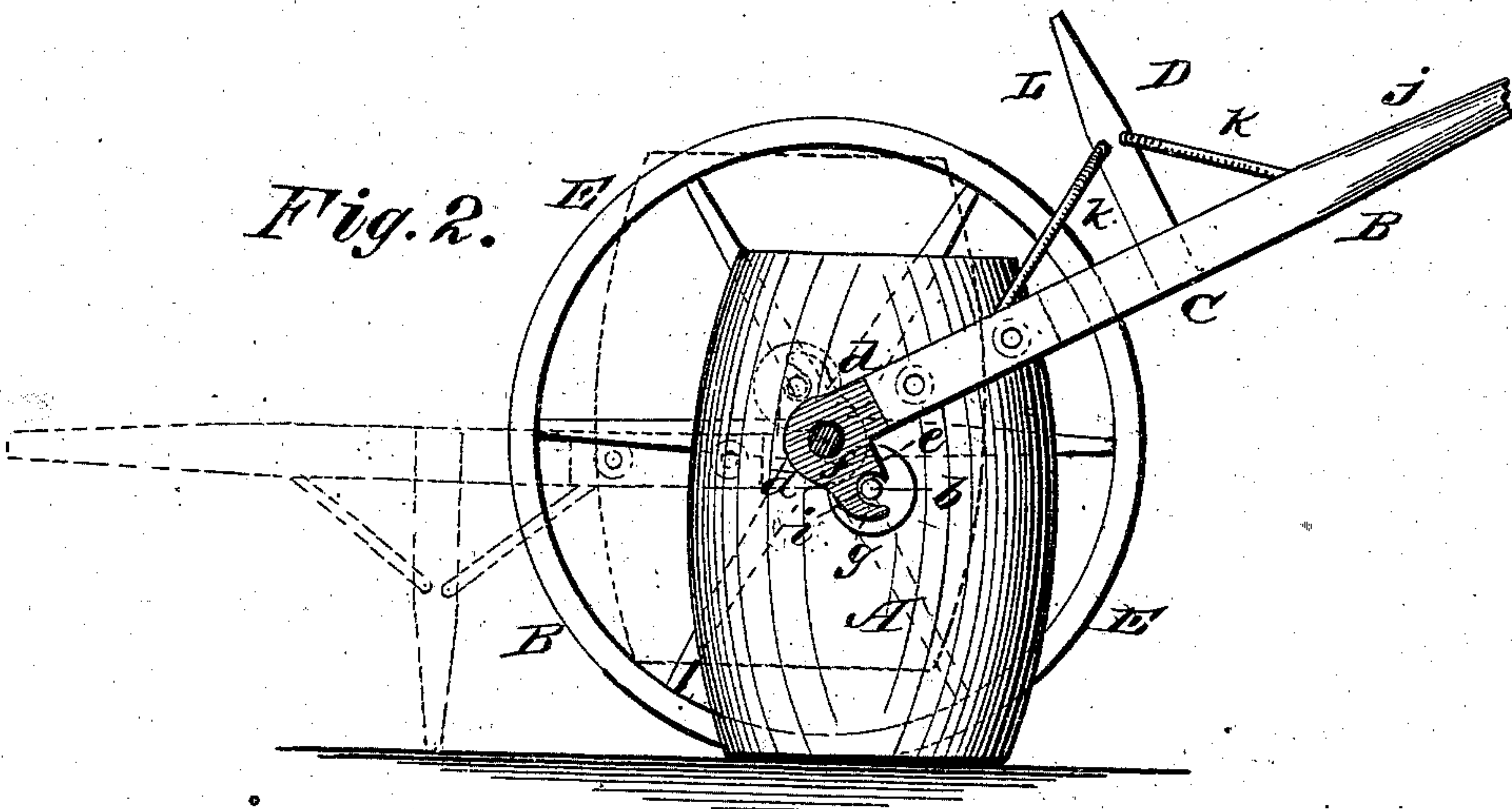
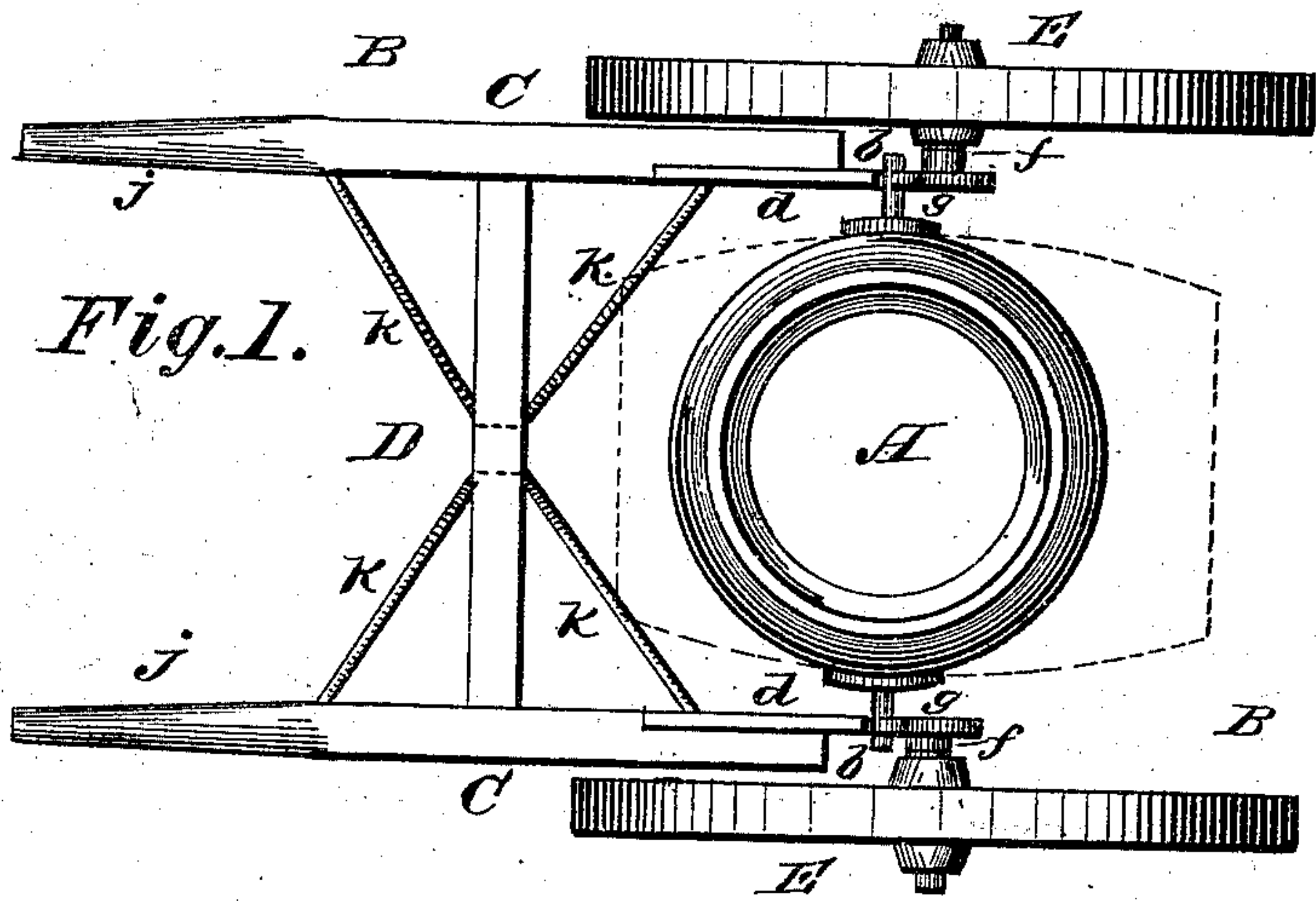


G. ADAIR & F. E. PALMER.
Barrel-Cart.

No. 217,503.

Patented July 15, 1879.



Witnesses:

D. C. Dietrich.
M. C. Kupperman.

Fig. 3.

Inventors
George Adair
Francis E. Palmer.
Per Manahan & Ward Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE ADAIR AND FRANCIS E. PALMER, OF ROCK FALLS, ILLINOIS.

IMPROVEMENT IN BARREL-CARTS.

Specification forming part of Letters Patent No. **217,503**, dated July 15, 1879; application filed January 28, 1879.

To all whom it may concern:

Be it known that we, GEORGE ADAIR and FRANCIS E. PALMER, of the village of Rock Falls, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Barrel-Carts; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Our invention relates to an improvement in barrel-carts; and consists chiefly in constructing the cart so that with it the barrel can be picked up for transportation, and unloaded without being moved from the perpendicular, and thus disturbing its contents, and also without touching the barrel with the hands. In the matter of moving swill-barrels this latter is palpably a great advantage.

Figure 1 is a top or plan view of a machine embodying our invention. Fig. 2 is a side view in the position of picking up the barrel. Fig. 3 shows enlarged detached views of the barrel A, lug *b*, and bolt *c*, the plates *d*, having the vertical lever *e*, and spindle *f*.

A is an ordinary barrel, to the opposite sides of which are attached the lugs *b b*. The lug *b* consists of a hollow stem having a broad base, and placed at right angles with the barrel, on the outside thereof, and is attached to the barrel by a screw-bolt, *c*, which, having a head and washer inside the barrel and passing lengthwise through the lug, is fastened with a thread and nut at the outer end of the lug.

B is a cart, consisting of the frame D, mounted on two wheels, E E. The side plates, C C, have each attached thereto a plate, *d*, which has the short vertical lever *e*, with hook *g* and recess *i*, as shown, and on the outside of which plate *d* are also formed the spindles *f*, upon which the carrying-wheels E revolve.

By constructing the frame D with but three sides it can be made to half encircle the barrel, and thus bring the plates *d d* respectively to the lugs *b b*. By raising the handles *j j* the

upper end of the levers *e e* are lowered and the lugs may be easily guided into the recesses *i i*. Then by again lowering the handles *j j* the levers *e e* are raised and the barrel A lifted thereby from the ground, ready for transportation.

By reversing the operation lastly described the barrel A can be as readily unloaded. The center of gravity of the barrel being below the lugs *b*, the barrel maintains the perpendicular. As the barrel and contents are sometimes quite heavy, the frame, having but three sides, requires no unusual bracing.

To that end we provide the post L under the cross-beam M, and attach thereto the firm braces K K K K, as shown. This is of greater importance than would appear at first view; but our experience has taught us that it is impracticable to sustain the necessary weight on a three-sided frame with the usual horizontal braces.

Many advantages may be claimed for our invention. The lugs *b* may be cheaply cast, and thus many barrels may be furnished therewith to be used in connection with the one cart. Again, the barrel can be more readily filled when detached from the cart. The barrel, being pivoted, can be readily emptied while on the cart, or the contents dipped out after the barrel is unloaded.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a barrel-cart, the barrel A, when provided with the lugs *b b* and bolts *c c*, substantially as described, and for the purpose specified.

2. The side plates, C C, of the cart B, provided with the plates *d d*, having the short hooked levers *e e* and spindles *f f*, integral therewith, the post L, and braces K K K K, all constructed and operating in the manner described, and for the purpose mentioned.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

GEORGE ADAIR.
FRANCIS E. PALMER.

Witnesses:

J. J. CUSHING,
ELIAS D. LEFEVRE.