

(No Model.)

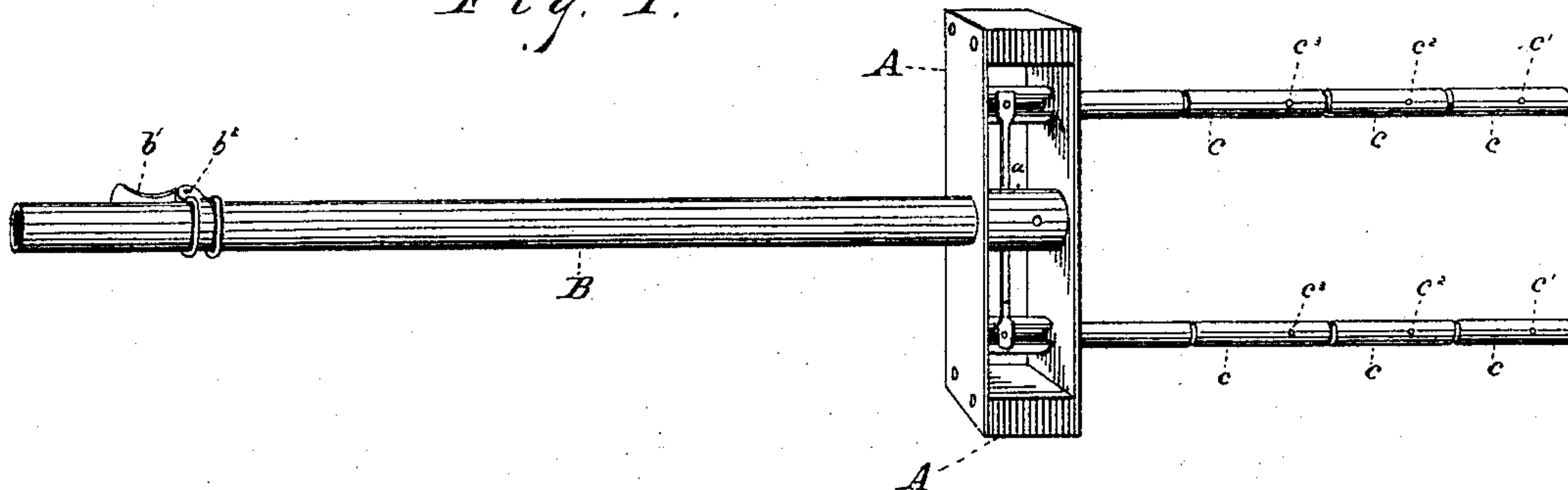
E. DAWSON.

BRICK FORK.

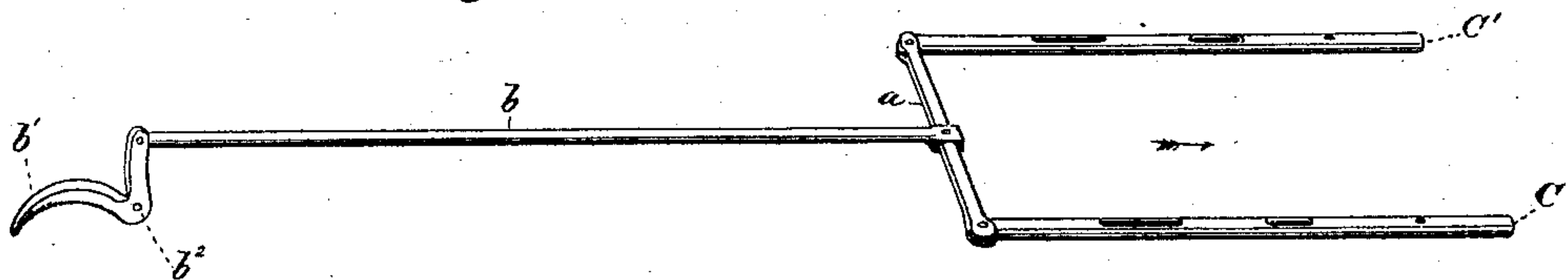
No. 276,366.

Patented Apr. 24, 1883.

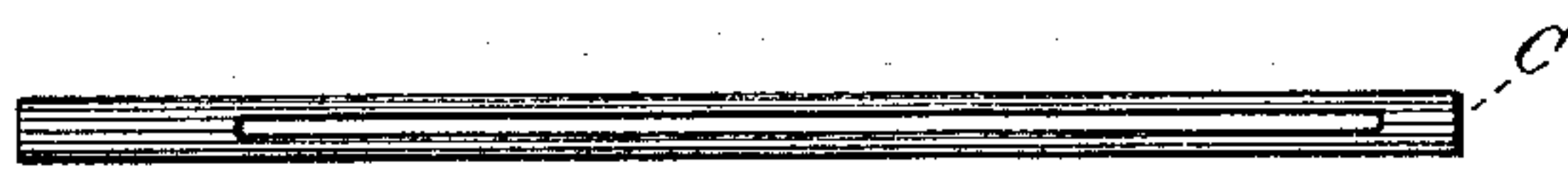
*Fig. 1.*



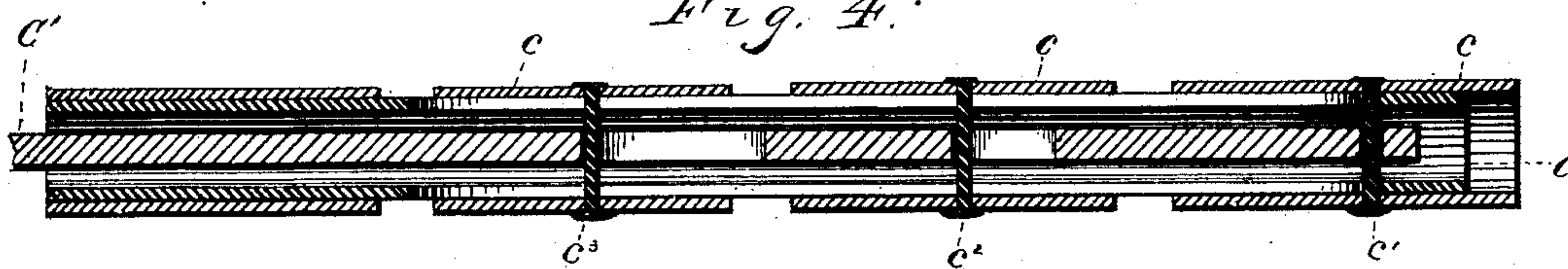
*Fig. 2.*



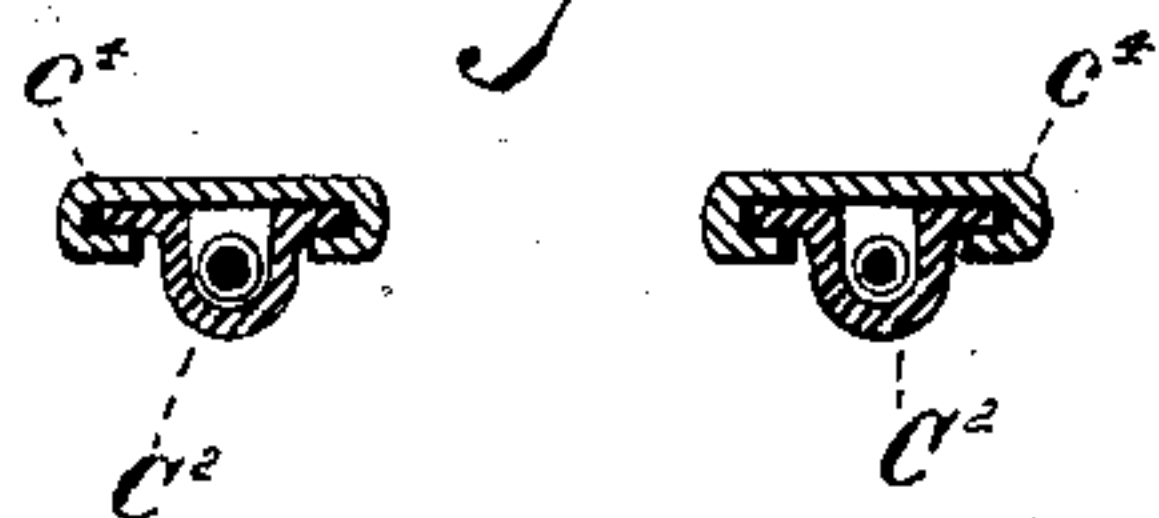
*Fig. 3.*



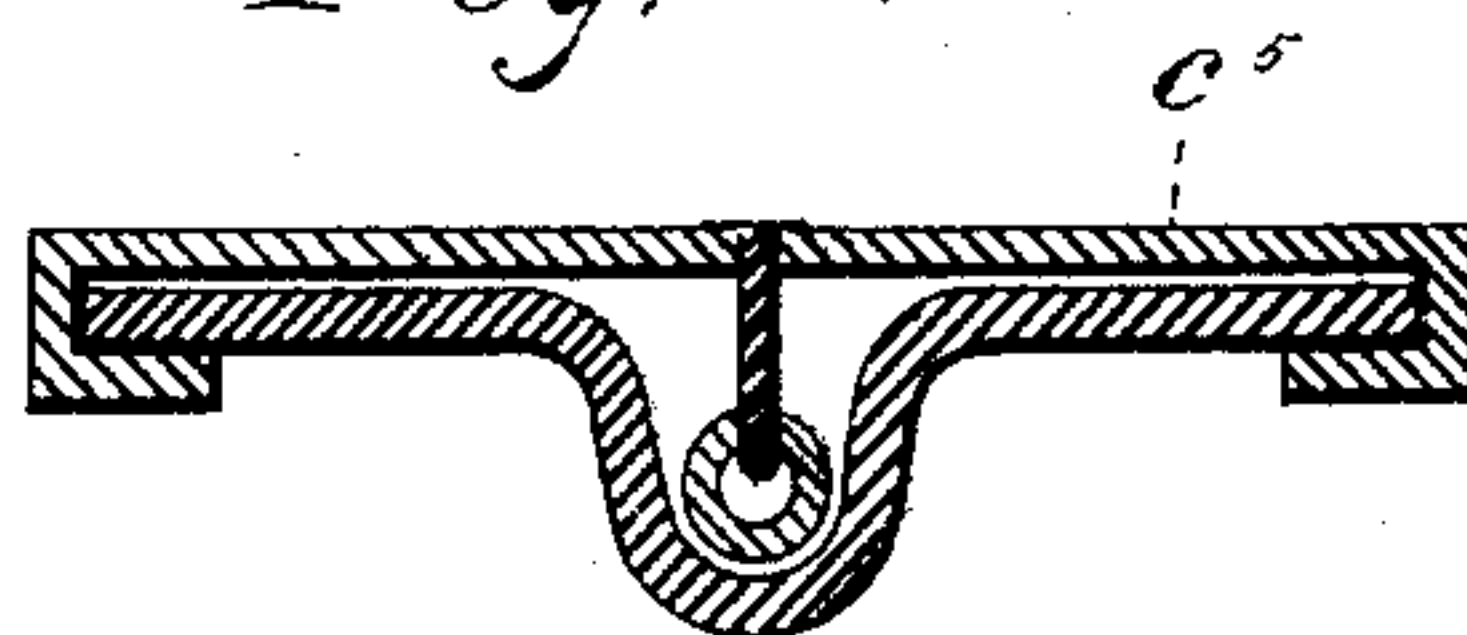
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

EDWARD DAWSON, OF AUBURN, ILLINOIS, ASSIGNOR TO JAMES W. PENFIELD, OF WILLOUGHBY, OHIO.

## BRICK-FORK.

SPECIFICATION forming part of Letters Patent No. 276,366, dated April 24, 1883.

Application filed January 25, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD DAWSON, of Auburn, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Brick-Forks; 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 pertains to make and use the same.

My invention relates to improvements in brick-forks; and it consists of certain features of construction and combinations of parts hereinafter described, and pointed out in the claims.

In manufacturing bricks, immediately after they are formed in proper shape, they are set upon their edges to dry, preparatory to then being placed in a kiln for burning. In order to facilitate this drying process, the bricks should be separated, whereas when they are finished by the machine they are usually left in close contact. As it is too slow a process to remove the bricks from the machine singly, and if removed in numbers it requires much time to separate them, I have invented a brick-fork by means of which a number of bricks may be moved at once and set on their edges in hacks or on pallets and properly separated without consuming any time in separating them.

Large quantities of bricks are made by machines that make two holes in each brick through the flat or thin way of the bricks. I will describe a fork embodying my invention that is made in a convenient shape for moving this kind of bricks by inserting the prongs of the fork into the holes in the bricks.

In the drawings, Figure 1 is a view in perspective of my device. Fig. 2 shows a combination of parts as used in the internal construction of my device. Fig. 3 is an isometric view of one of the prongs of the fork. Fig. 4 is a vertical longitudinal sectional view of one of the prongs of the fork, showing its internal construction and outside attachments. Figs. 5 and 6 are end views, showing different manners of making the prongs of the fork.

A represents the head of the fork. A convenient way of making this head is to use two plates properly secured to each other, but separated at a suitable distance for operating be-

tween these certain parts of the device hereinafter described. To one side of the head is attached the hollow handle B, and to the other side are attached the two prongs C. Upon the said prongs are placed the movable 55 thimbles *c*. These thimbles are each provided with a pin passing through the thimble from side to side and operating in a slot made in each prong, as shown in Fig. 3. If so desired, short slots might be made in the prongs in 60 which to operate these pins, instead of the continuous slot shown. Inside the hollow prongs C are placed and operated the rods or connections C'. These rods are attached to the cross-bar *a*, operating inside of the head A. 65 The cross-bar *a* is connected by the rod *b* to the crooked lever *b'*. The rod *b* may operate inside of the handle B; or the said handle, if made solid, may have a groove in which to operate the said rod. The crooked lever *b'* is 70 fulcrumed at *b<sup>2</sup>* to an attachment of the handle B in such a manner that by pressing on the handle of the said crooked lever the rods C', by means of their attachments to said lever, shall be thrust forward in the direction shown 75 by the arrow in Fig. 2.

The internal and external adjustments of parts in connection with the prongs are shown in the sectional view, Fig. 4, where the rod C' is shown as thrust forward, carrying with it 80 the thimbles *c* and extending them or separating them, as shown. In Fig. 1 the thimbles are shown with their ends in contact.

As shown in Fig. 4, the pin *c'* passes through a tight-fitting hole in the rod C', while the pin 85 *c<sup>2</sup>* passes through a slot in said rod, and the pin *c<sup>3</sup>* operates in a still longer slot in the said rod.

By operating the lever *b'* the rod C' may be drawn back, together with the pin *c'* and the 90 attached thimble *c*, and these will in turn draw back the other thimbles until the parts are in the position shown in Fig. 1. The same result may be had by holding the fork in a vertical position, with the prongs uppermost, 95 when the parts by their own gravity will return to their position, as in Fig. 1.

The thimbles next the head A are not movable, and it is better to have them pass through the head to give additional strength to the 100



parts, and in such a case these thimbles and the prongs C are slotted inside the head A, as shown in Fig. 1, in a suitable manner for attaching the cross-bar *a* to the rods C' and operating the same.

The operation of my device is as follows: The parts being in the position shown in Fig. 1, the prongs of the fork are either inserted in the holes of the bricks or are placed under the bricks in such a manner that the bricks shall rest on the said thimbles as supports, in which manner the bricks are lifted from the brick-machine. While the bricks are held on the fork, by pressing on the lever *b'* and by means of the aforesaid attachments, the rods C' are moved forward, carrying the pins *c'* and the attached thimbles and the brick resting on these thimbles. When these parts have moved a short distance—say one-fourth inch—the pin *c'* is engaged by the shoulder at the end of the slot in which pin *c'* operates, and this, too, is moved along. Next the pin *c'* is in like manner engaged and carried along until the thimbles or supports for the brick are in the position shown in Fig. 4, with the bricks on the fork separated in the same manner and distance as the thimbles are separated, in which separated condition the bricks are placed in hacks or on pallets for drying.

In case it is desired to use these forks for removing bricks that are made without holes in them, as the fork would have to be applied to the under side of the bricks, prongs might be made, as shown at C<sup>2</sup>, Fig. 5, with sleeves, as at *c'*, instead of the thimbles before de-

scribed; also, in place of two prongs, one might be used with a broad sleeve, *c'*. (Shown in Fig. 6.)

I do not limit myself to the precise construction herein described, as almost every portion of the device could be made in various ways and still accomplish the same result. For instance, in place of the slots in the rods C', notches on the side of the rod or pins extending laterally from the said rod to engage the pins *c'*, *c'*, and *c'* would produce the same result.

What I claim is—

1. A brick-fork by means of which the bricks may be separated by a manipulation of the fork while the bricks are on the fork, substantially as and for the purpose set forth.

2. In a brick-fork, movable thimbles, sleeves, or supports, upon which bricks may be lifted and separated by a manipulation of the fork, substantially as shown and described.

3. In a brick-fork, the combination, with movable supports upon which bricks may be lifted, of a lever and attachments, by the operating of which the bricks may be separated while they are supported on the fork, substantially as described, and for the purpose specified.

In testimony whereof I sign this specification, in the presence of two witnesses, this 19th day of January, 1883.

EDWARD DAWSON.

Witnesses:

HENRY DAWSON, Jr.,

MATTHEW C. DAWSON.