

No. 694,051.

Patented Feb. 25, 1902.

A. F. BROWN.
HORSE HAY RAKE.

(Application filed June 29, 1899.)

(No Model.)

Fig. 1.

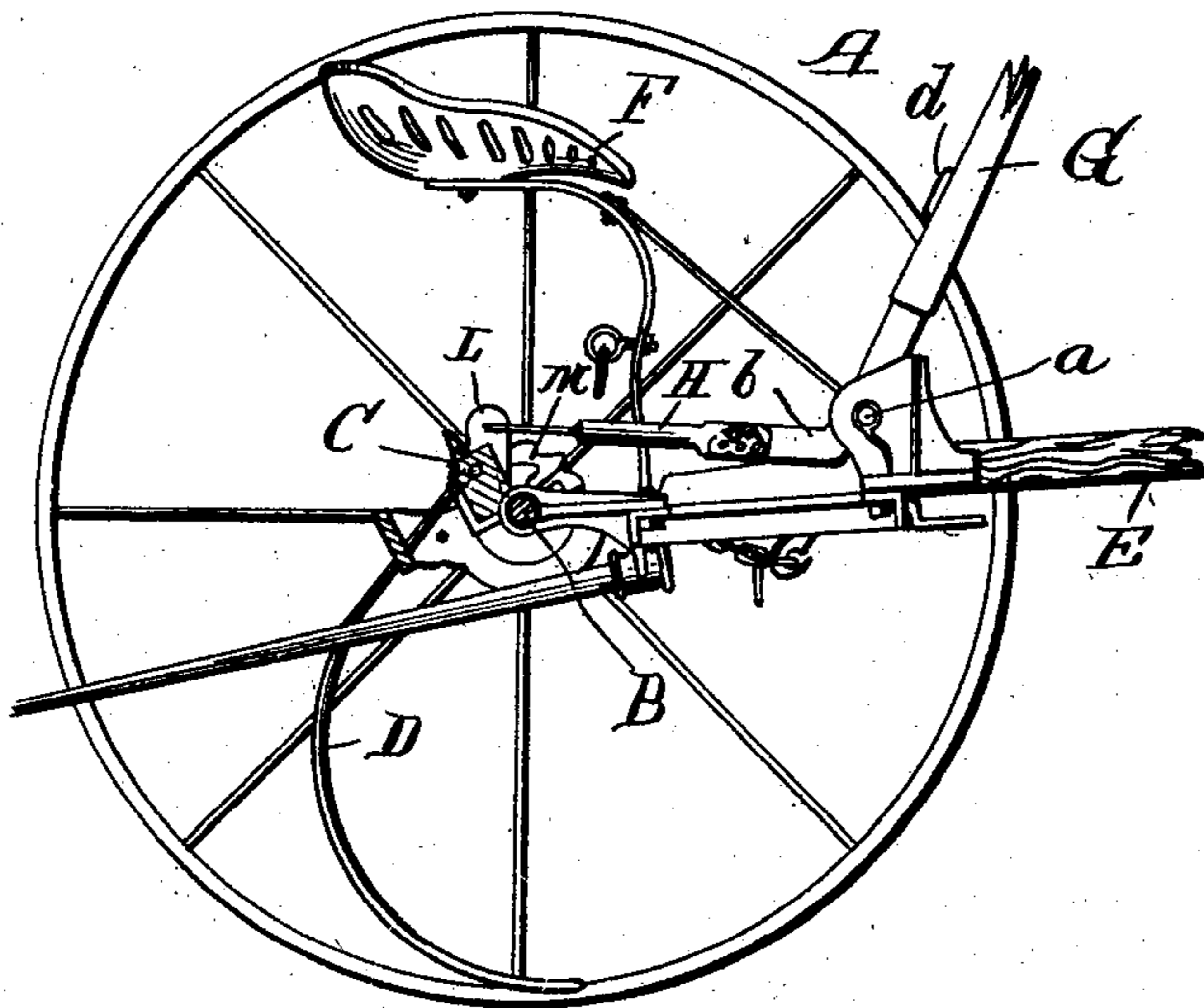


Fig. 2.

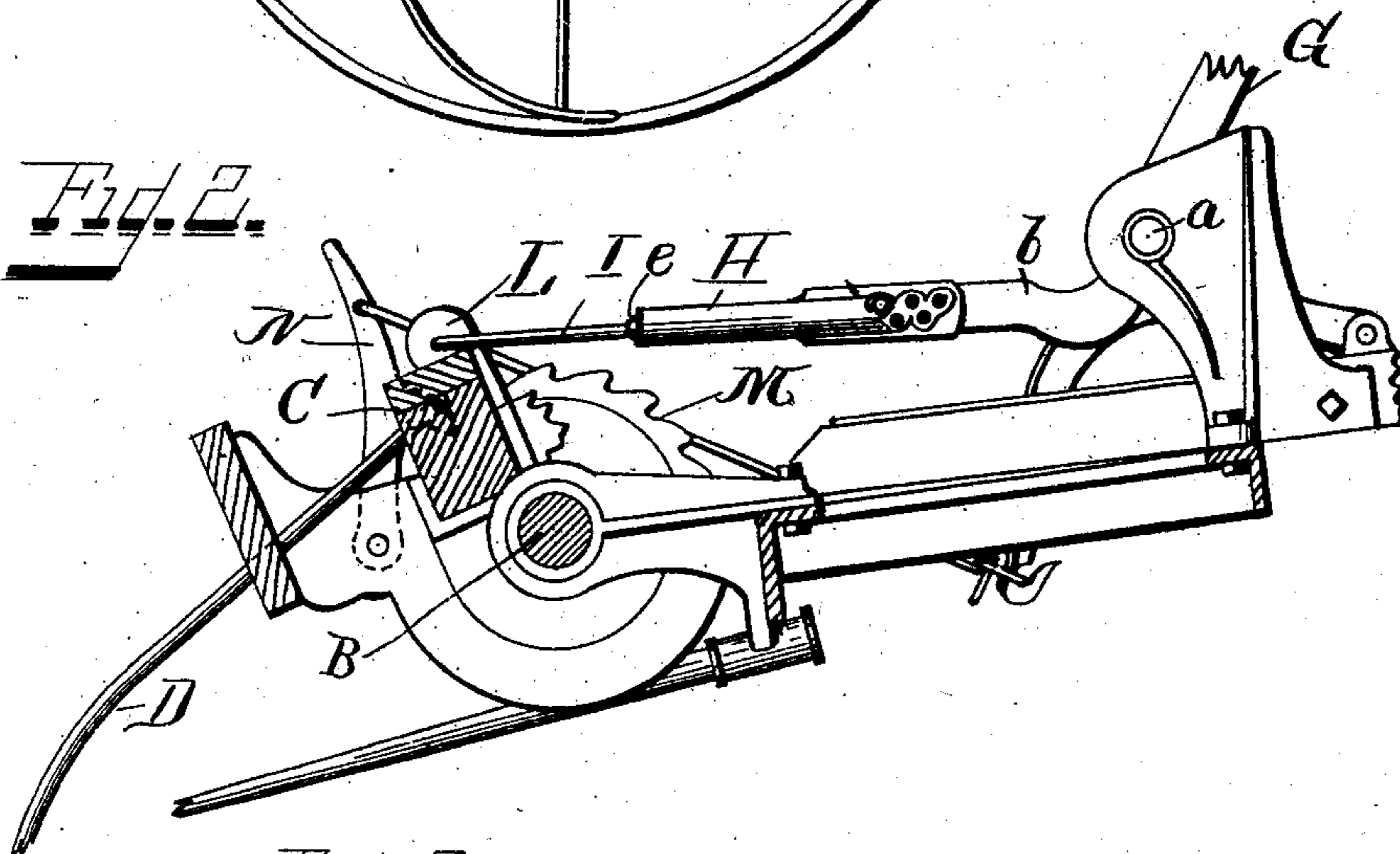
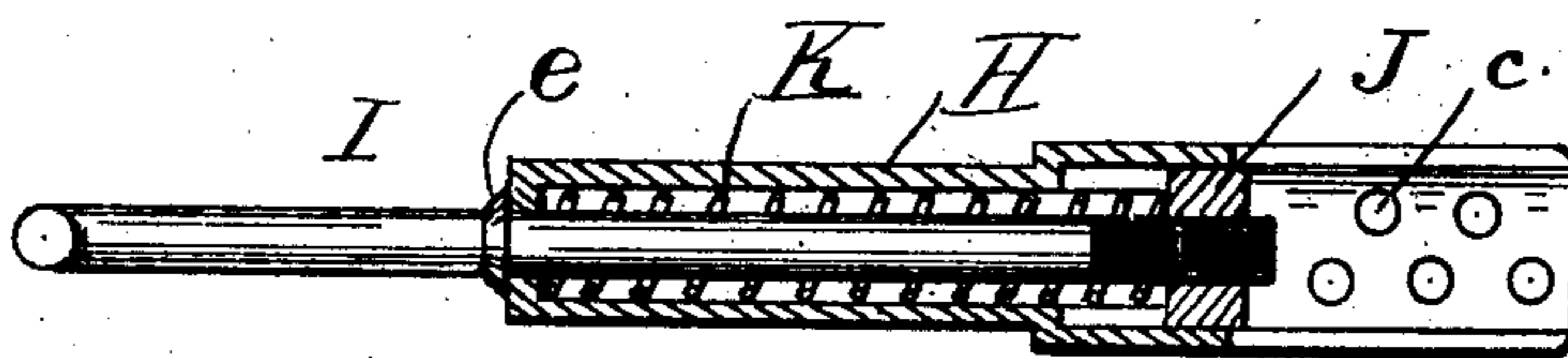


Fig. 3.



WITNESS

Wm. J. Beck.

Claude Procuniar

INVENTOR

Arthur F. Brown

BY

Chas. M. Beck

his ATTORNEY

UNITED STATES PATENT OFFICE.

ARTHUR F. BROWN, OF DAYTON, OHIO, ASSIGNOR TO THE STODDARD MANUFACTURING COMPANY, OF DAYTON, OHIO, A CORPORATION OF OHIO.

HORSE HAY-RAKE.

SPECIFICATION forming part of Letters Patent No. 694,051, dated February 25, 1902.

Application filed June 29, 1899. Serial No. 722,247. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR F. BROWN, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Horse Hay-Rakes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates particularly to wheeled hay-rakes operated by the traction of the machine, which when its axle or other revolving means is put in connection with the rake-head effects the tilting of the same and elevation of the teeth to discharge the load.

The novelty of my invention, as well as the means for carrying it out, will be hereinafter set forth, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a sectional side elevation of a hay-rake embodying my invention. Fig. 2 is an enlarged side elevation of the parts embodying the rake-head, its operating means, and my arresting device applied thereto, the whole being shown in section. Fig. 3 is an enlarged sectional detail of my improved arresting device.

The same letters of reference are used to indicate identical parts in all the figures.

A represents one of the ordinary supporting-wheels of a horse hay-rake, with a continuously-revolving axle B, connected in the usual or any suitable manner to the wheels A by ratchet-and-pawl mechanism and having journaled thereon the rake-head C, carrying the teeth D, and to which is journaled in the usual or any suitable manner the main frame, composed of the thills E, with their cross-pieces, and the driver's seat F, all of which may be of the usual or any suitable construction.

G is the hand-lever, pivoted, as at *a*, by its gooseneck or bell-crank *b* to the main frame, and from the rear member of this bell-crank of the hand-lever I connect my arresting device to the rake-head. This arresting device is composed of a shell or barrel H, Fig. 3, with a series of connecting apertures *c* in its forward end, by which it is adjustably piv-

oted to the rear member of the bell-crank *b*, as seen particularly in Fig. 2. Within this barrel H is fitted a rod I, having an adjustable follower J screwed upon its forward threaded end and between which and the closed end of the barrel and surrounding the rod I is a coiled spring K. The rear end of the rod I is hooked to engage any suitable projection or eye L on the rake-head.

It will be seen from the foregoing construction that the members H I are telescoped with a yielding spring connection between them, that they are adjustably united the one to the other, and that the member H is adjustably united to the hand-lever of the hay-rake in such manner that after the teeth have been elevated to discharge a load and the rake-head falls with its teeth and reaches the limit to which it is intended to fall the rod I by means of the spring K is put under tension and constitutes a spring-buffer to prevent the teeth from falling farther with too sudden a jar, so as to cause injury or breakage to them.

If the rake is a self-dumping rake, with a ratchet M on its axle B, and a pawl N pivoted to its rake-head for locking the latter to the ratchet on the axle, the hand-lever G, as such, may be employed or omitted at will. It is convenient to have such a hand-lever, even on a self-dumping rake; but it is quite apparent that such a hand-lever might be omitted, in which event the only essential would be to connect the arresting buffer or device to the bell-crank *b*, which has at its upper projecting end a footpiece *d* for the driver's foot and by which he can hold the teeth properly down to their work, and in this connection I employ a collar or projection on the rod I, which prevents it from being pushed forward into the barrel H.

By turning the rod I through the nut J the latter is moved thereon to regulate the tension of the spring K, as will be readily understood.

Having thus fully described my invention, I claim—

In a horse hay-rake, the combination with the main frame thereof, of the rake-head pivoted to said frame and provided with an arm or projection L, a hand-lever G provided with

the bell-crank *b* by which said hand-lever is pivoted to said main frame, the rod *I* attached at its rear end to said arm or projection *L* and having the rigidly-attached collar
5 or stop *e* and adjustable nut *J*, the barrel or housing *H* into which said rod extends and which is adjustably attached at its forward end to said bell-crank, and the cushioning-

spring *K* housed within said barrel and interposed between the rear end thereof and said *ro* nut, substantially as set forth.

ARTHUR F. BROWN.

Witnesses:

OWEN N. KENNEY,
CHAS. M. PECK.