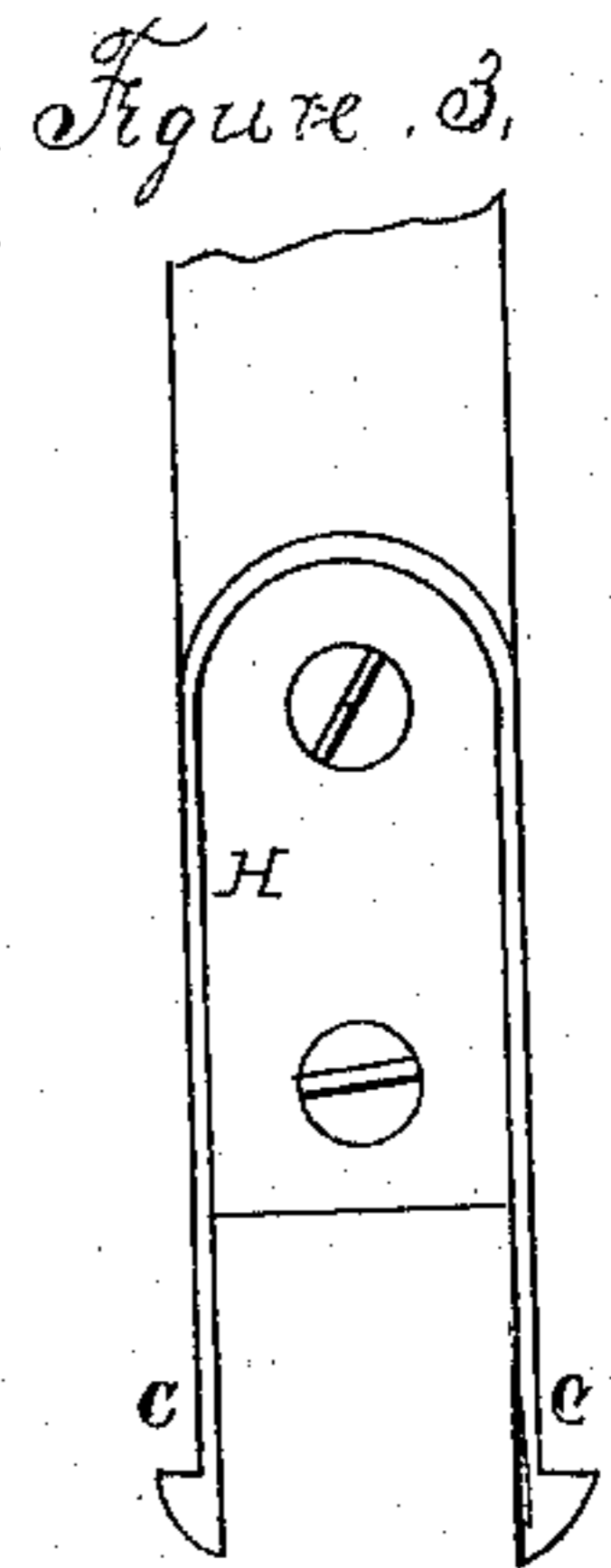
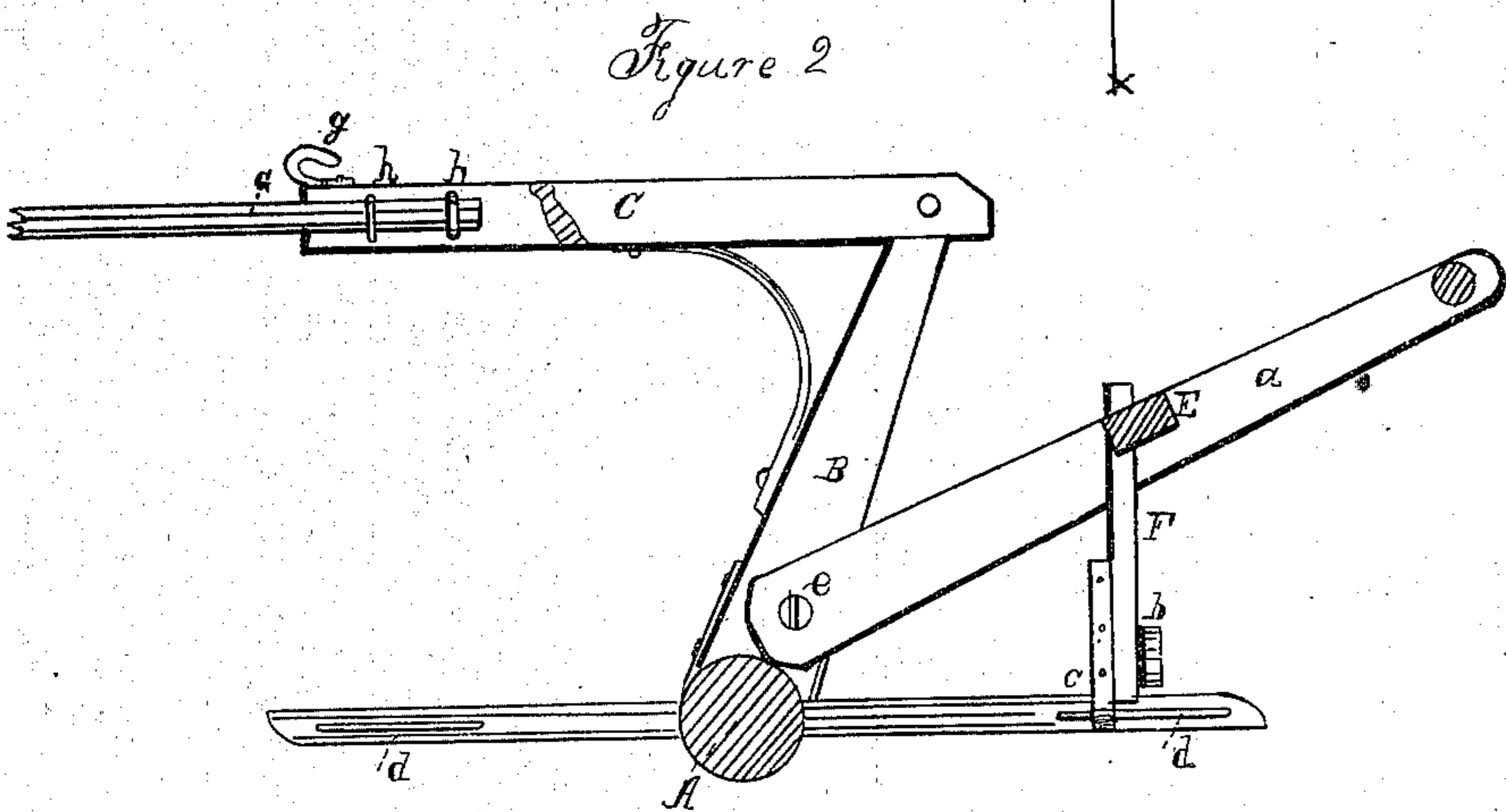
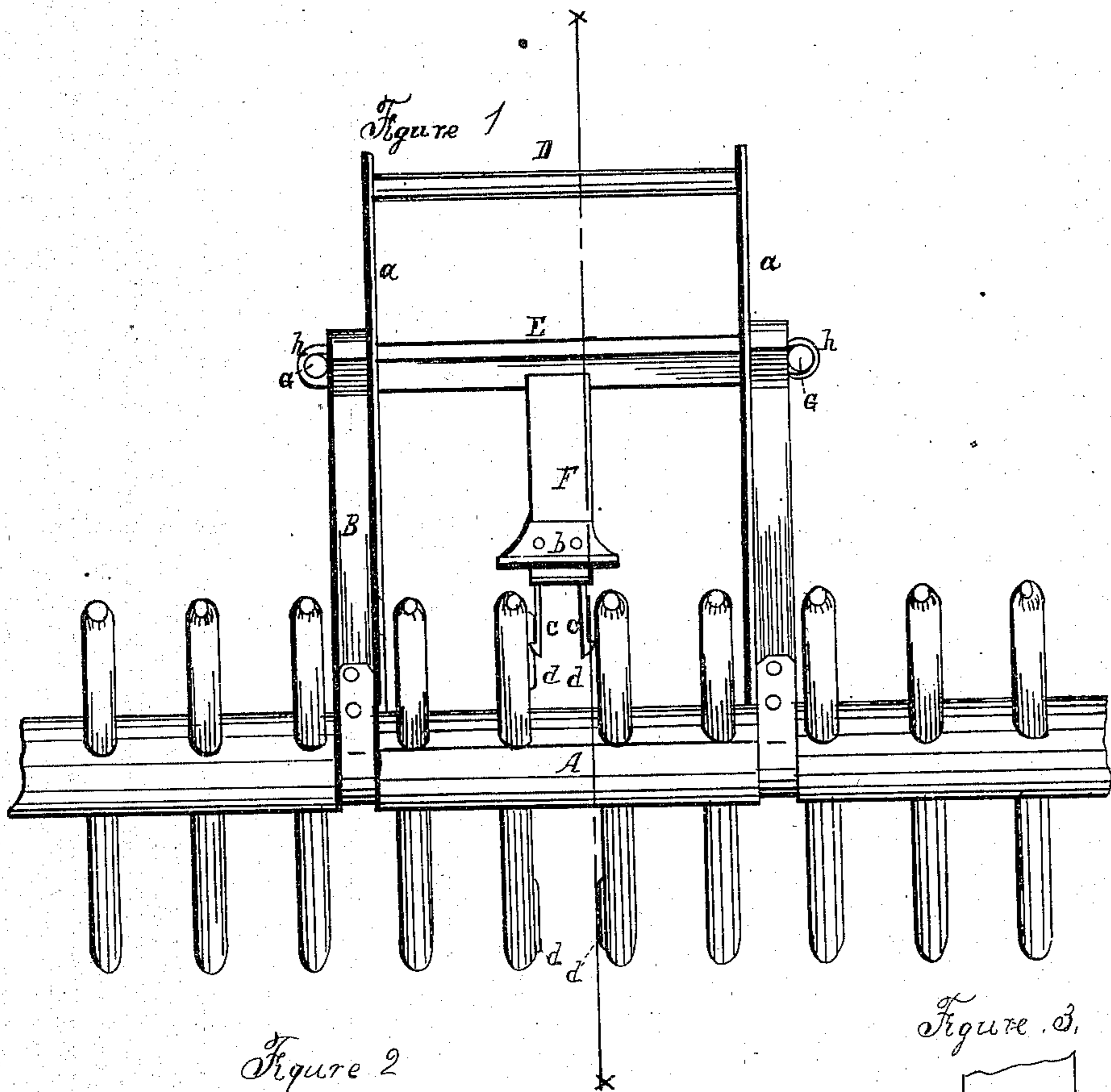


*J. Perry,
Revolving Rake.*

No. 87363.

Patented Mar. 2, 1869.



Attest
J. Cochran
L. Adams

Inventor
John Perry
per *Wm. H. Adams*
attys.

United States Patent Office.

JOHN PERRY, OF VERNON, INDIANA, ASSIGNOR TO HIMSELF AND
BENJAMIN C. BAKER, OF SAME PLACE.

Letters Patent No. 87,363, dated March 2, 1869.

IMPROVEMENT IN HORSE-RAKES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN PERRY, of Vernon, in the county of Jennings, and State of Indiana, have invented an Improved Hay-Rake; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a rear view of the rake.

Figure 2, a longitudinal vertical section of the same.

Figure 3, a view of the spring.

Like letters of reference designate corresponding parts.

My improvement consists in providing a hay-rake, of the kind shown, or one of similar construction, with adjustable thills or shafts, in such a manner that they may be readily removed if desired.

I have lettered the different parts of the rake, for convenience of comparing the different views in the drawings, but will only refer to such parts as may be necessary to make my improvements clearly understood.

Let A represent a rake-head;

B B, pendants;

C C, a thill-frame; and

a a, handles for guiding the rake.

In the outer sides of frame C C are driven staples, *h h*; or, they may be stirrups, with nuts and screws for securing the same to the frame C C, or any other equivalent device. The rear staple of each set of two is somewhat larger than the forward one.

The thills G G are of a taper-form from but to

point, and, when it is desired to use the rake, they are inserted in the staples *h h* from the rear. Their taper-form prevents them from drawing through, and the difference in the size of the staples causes the thills to fit snug and tight.

This adjustability of the thills is very convenient, as they may be taken out and replaced with the greatest ease and facility; and when removed, the rake may be housed in much less room than if the said thills were permanently attached.

Another important feature of my invention is the peculiar construction of the spring H. This spring is bent in the form shown in fig. 3, and has catches, *c c*, formed on its lower extremities.

The mode of forming the spring in one piece, and the manner of attaching it, I consider the best and cheapest that can be devised, and I believe it to be novel.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The adjustable thills G G, and staples *h h*, arranged and combined to operate substantially in the manner and for the purposes as specified.

This specification signed by me, this 30th day of September, 1868.

JOHN PERRY.

Witnesses:

ED. J. VAUTER,

WILLIAM O. WHITE.