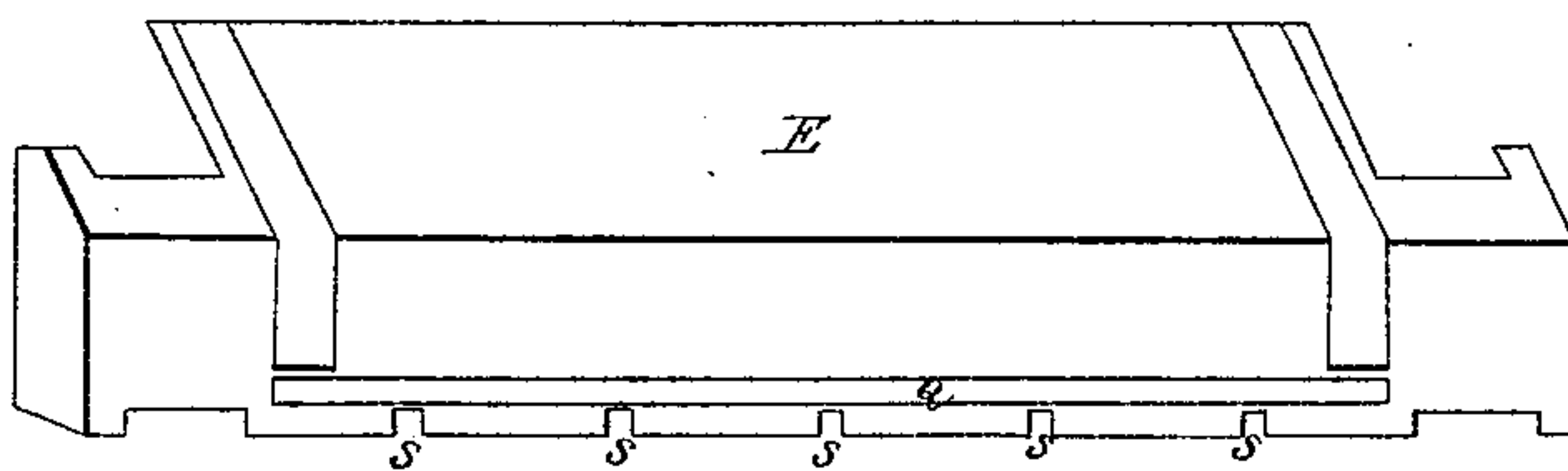
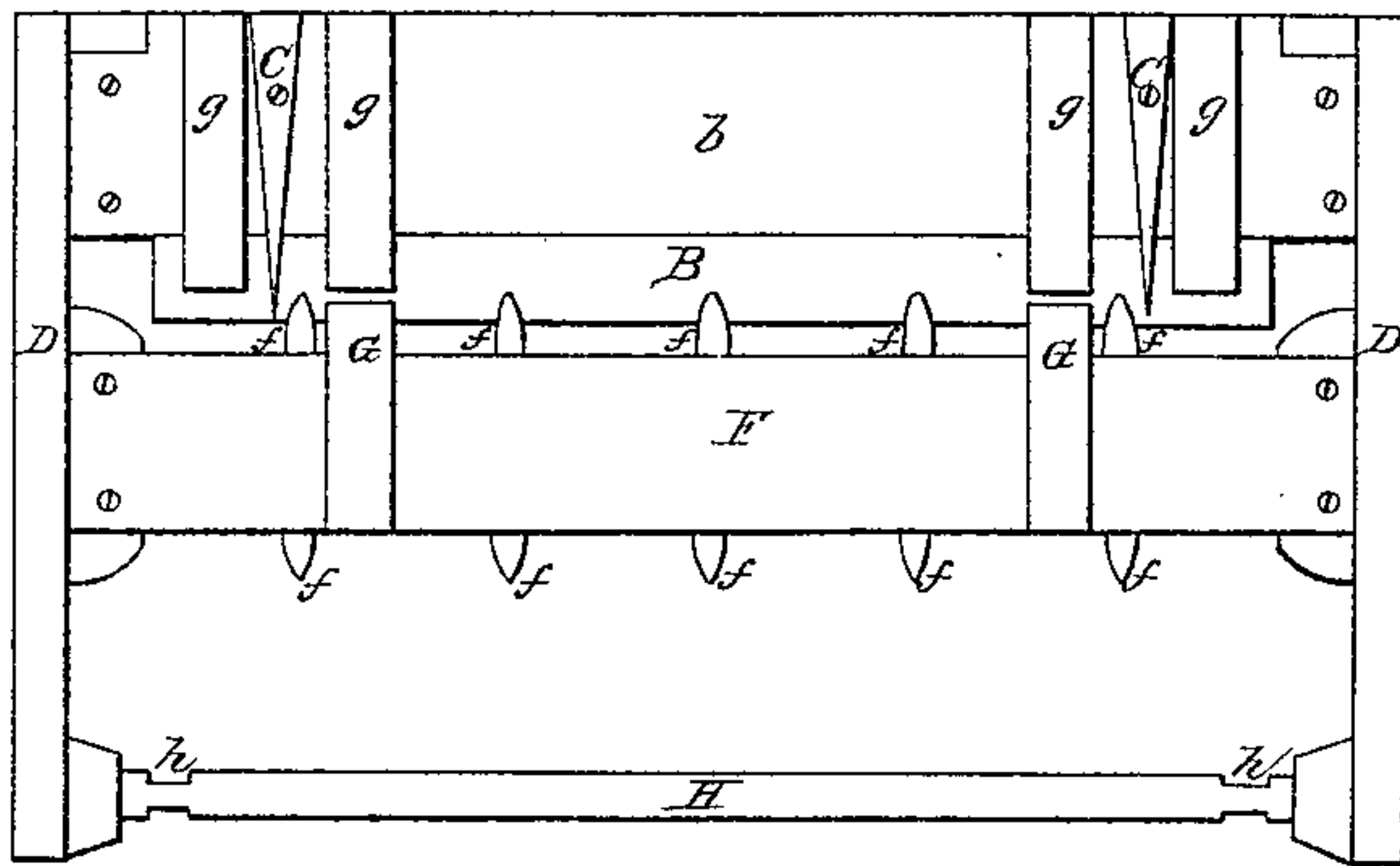
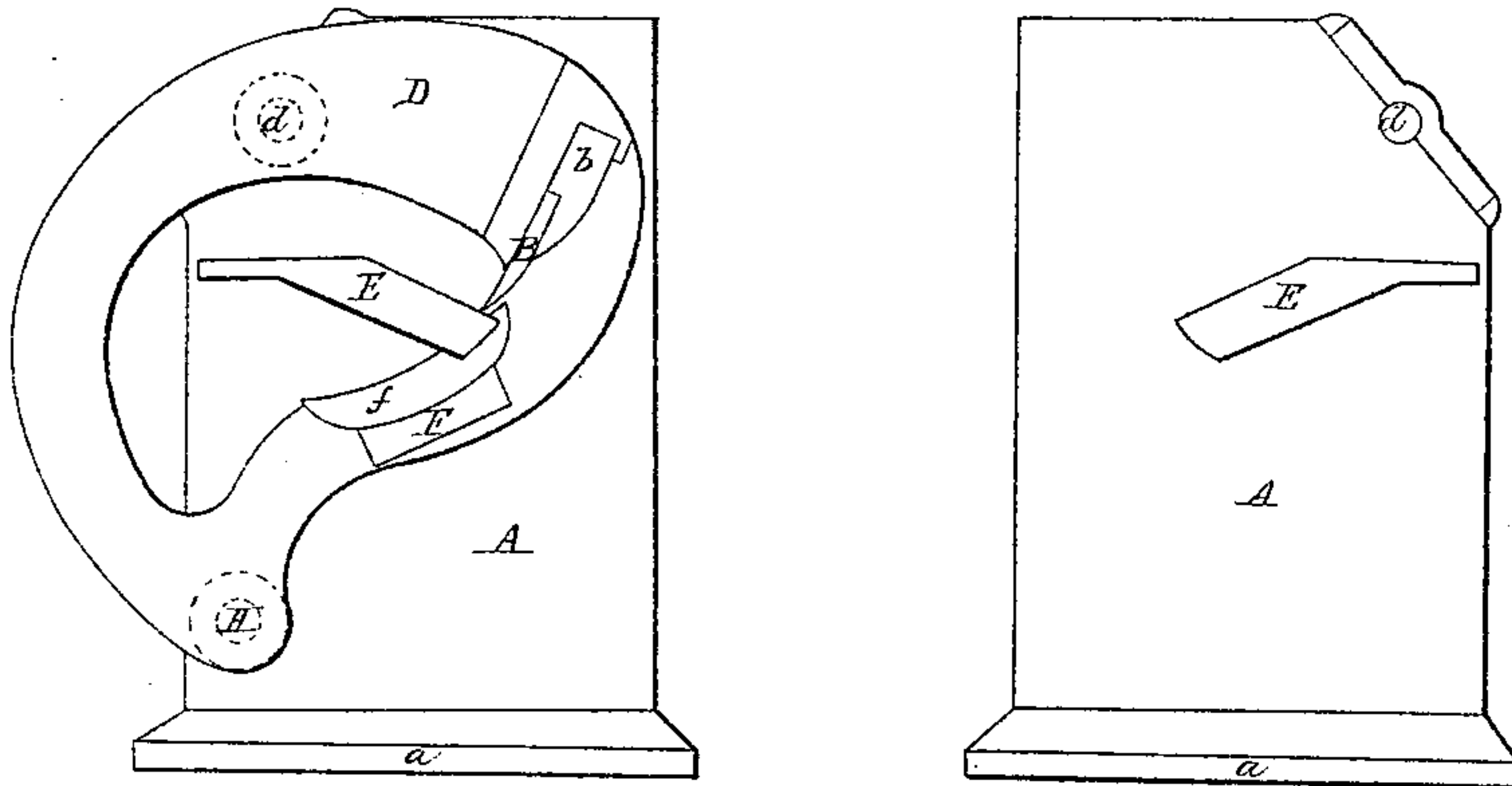


Moore, Clark & Lindsey,
Making Stares.

N^o 19,308.

Patented Feb. 9, 1858.



Witnesses
John Elliott
J. D. Day

Inventors:
Elias Moore
William Clark
James Lindsey

UNITED STATES PATENT OFFICE.

E. MOORE, WM. CLARK, AND JAS. LINDSEY, OF SHELBYVILLE, INDIANA.

STAVE-MACHINE.

Specification of Letters Patent No. 19,308, dated February 9, 1858.

To all whom it may concern:

Be it known that we, ELIAS MOORE, WILLIAM CLARK, and JAMES LINDSEY, of Shelbyville, in the county of Shelby and State of Indiana, have invented a new and useful Improvement in Machinery for Cutting Barrel-Staves; and we do hereby declare that the following is a full and exact description of said improvement, in which we desire that the accompanying drawings be recognized as a portion thereof, like parts being cited by like letters in the various representations.

The nature of our invention consists in the arrangement of a concave knife within a movable framework, propelled by steam or other power so as to economize said power and cut barrel staves upon the most approved plan.

To enable others skilled in the art, to make and use our invention we will proceed to describe its construction and operation.

We will preface our description in detail, by remarking that we are aware that there are various devices now in use for cutting barrel staves, and the one most in use we will refer to, the better to convey a correct idea of the advantages our improvement has over all other similar machines. We refer to Crosset's stave cutter. In his machine the knife is made fast in a stationary framework, while the timber to be cut is carried up and down—to and from the knife, thus necessitating the hands of the person who feeds it, to follow the timber up and down, which operation endangers his safety, at the same time it is impossible to hold the timber steady and firm to the gage. From the last fact it is out of the question to make good work uniformly. We obviate these defects by constructing a movable framework, consisting of two eccentric oval end pieces D, D;—concave knife back *b*; and concave gage F;—the knife B being bolted to *b*;—stave guides *g*, *g*, *g*, *g*, also fastened to *b*; springs G, G, and gage ribs *f*, *f*, *f*, *f*, *f*, are attached to gage F, and all together are made to rotate up and down over the bed plate or table E, upon which the timber to be cut is placed. This knife frame, which

carries the knife and gage above described, rotates in the bearings *d*, in frame A, A. The same frame also carries cropping knives C, C, the function of which is to clip the ends of the staves to the desired length, at the same stroke which cuts the stave by knife B. The power which moves the knife frame, is applied at the bearings *h*, *h*, on connecting rod H.

Our knives are made of steel and iron, and all other parts are made of cast iron excepting the connecting rod H which is wrought, also pivots *d*, *d*. The springs G, G, are made of steel. The recesses *s*, *s*, *s*, *s*, *s*, upon E are for admitting the free passage of gage ribs *f*, *f*, &c., in their up and down motion. The base *a*, represents the necessary connection and staying of the side or end pieces A, A.

In the bed plate or table E, we have a groove or recess cast, into which we firmly fasten a strip of timber with the end of the wood grain standing out, which is to receive the edge of the knives when they cut through the stave timber.

Our machine operates as follows, viz: The timber after a thorough preparatory steaming, is placed upon the table E, in front of the knife B, and between knives C, C; and gage F, having been adjusted to the thickness that the stave is desired to be cut; and the knife frame having been set in motion from connecting rod H after the adjustment of cropping knives C, C, to the length that the stave is required to be; then the operator moves said stick of timber up to the gage F, as the knives move up, and in their downward motion the stave is cut both in thickness and length as it is desired.

What we claim therefore, and desire to secure by Letters Patent, is,

The combination of parts acting as a whole, substantially as herein specified, and for the purposes set forth.

ELIAS MOORE. [L. S.]
WILLIAM CLARK. [L. S.]
JAMES LINDSEY. [L. S.]

Witnesses:

JOHN ELLIOTT,
S. D. DAY.