

G. Farner,

Bending Tires,

N^o 34,506.

Patented Feb. 25, 1862

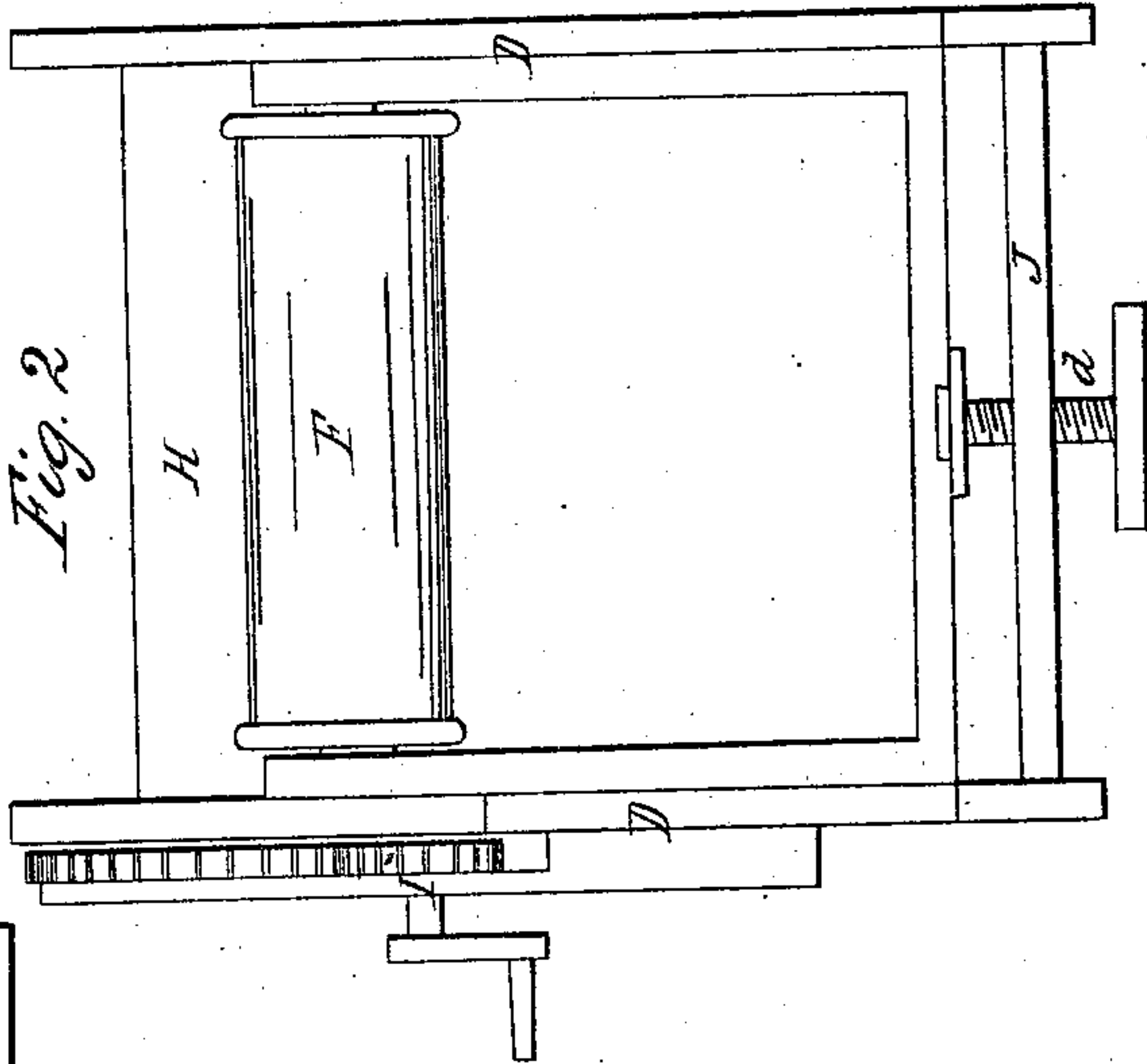


Fig. 2

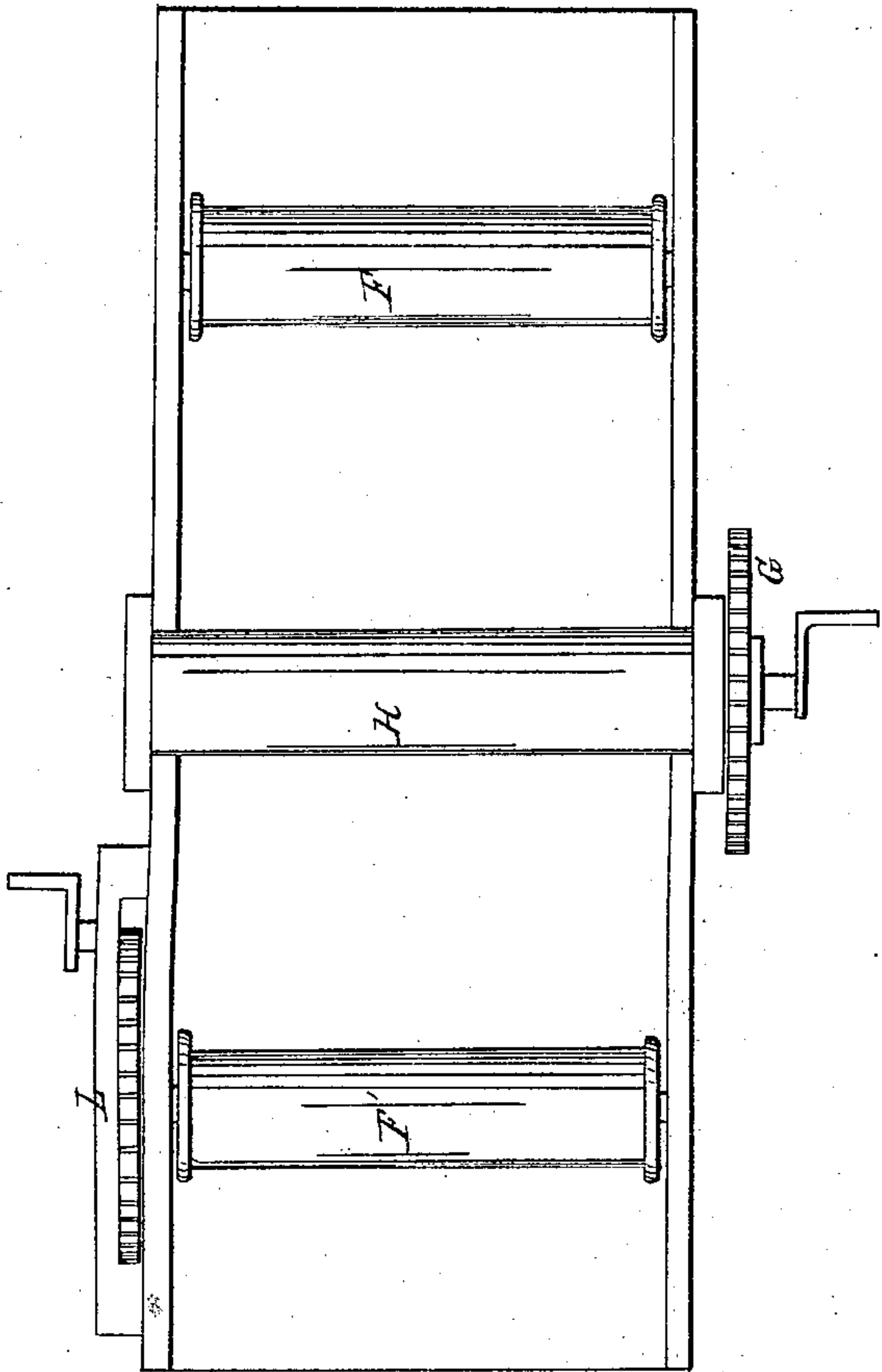


Fig. 3

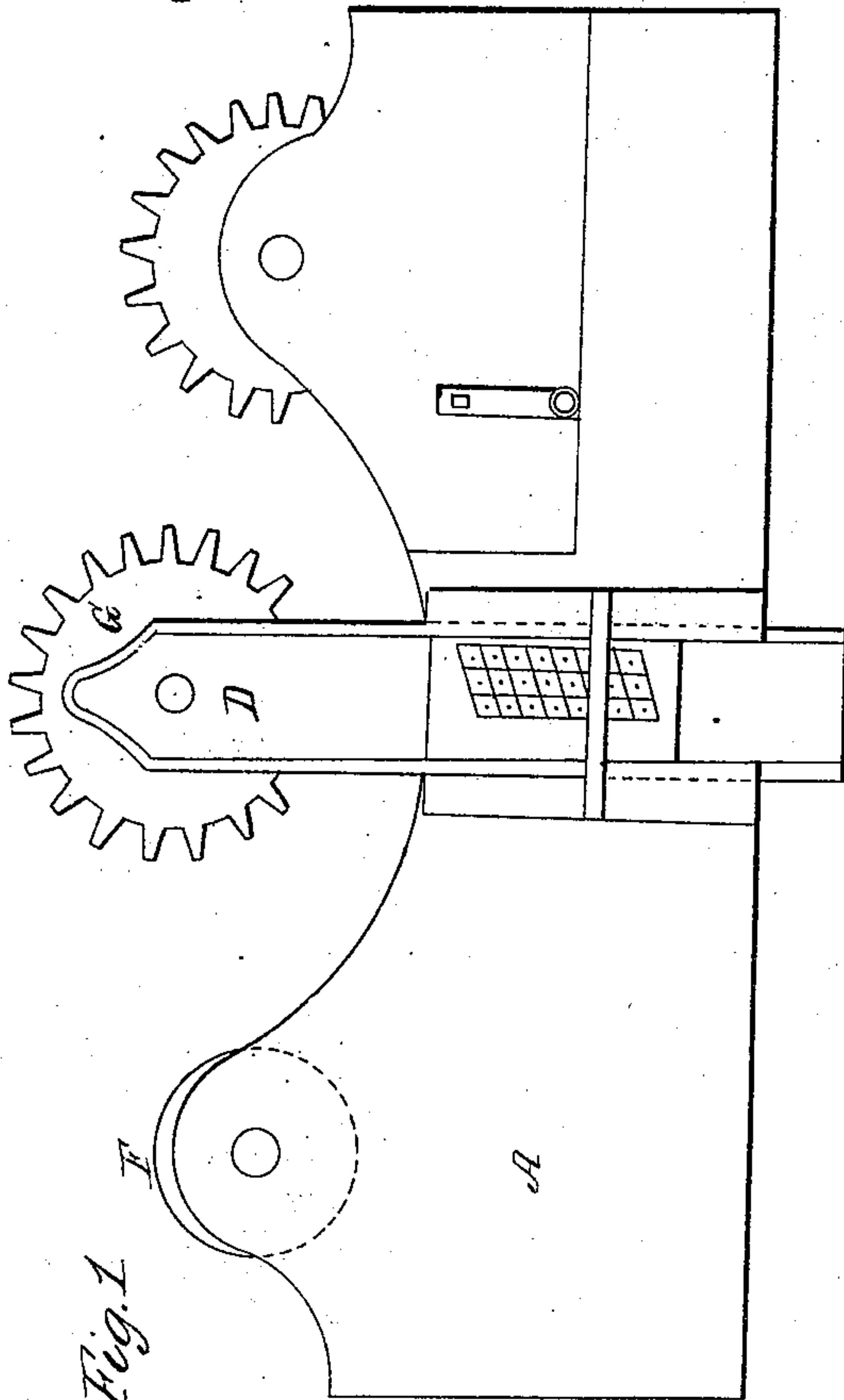


Fig. 1

Witnesses;
J. L. Hayes
G. Breed

Inventor;
Gabriel Farner
per Daniel Breed Atty.

UNITED STATES PATENT OFFICE.

GABRIEL FARNER, OF MARION, PENNSYLVANIA.

IMPROVEMENT IN APPARATUS FOR BENDING TIRES.

Specification forming part of Letters Patent No. 34,506, dated February 25, 1862.

To all whom it may concern:

Be it known that I, GABRIEL FARNER, of Marion, in the county of Franklin and State of Pennsylvania, have invented a new and useful Improvement in Machines for Bending Tires; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The common method of adjusting the rollers of tire-benders by means of two screws—one at each end of such rollers—is objectionable, because it is difficult with such arrangement to adjust the rollers so as to bend the tire without twisting the same. To remedy this defect is the chief object of my invention. This object is accomplished by arranging one of the rollers on a sliding frame or gate, and by moving such gate and roller by means of a single screw which acts equally on both ends of the rollers. My improved machine is also very simple, compact, cheap, efficient, and durable.

In the accompanying drawings, Figure 1 is a side view of my machine. Fig. 2 is an end view of the same. Fig. 3 is a top view.

Into the simple but strong frame A are placed two rollers F and F'. One of these rollers F' is provided with a cog-wheel L and a pinion E, the latter being furnished with a crank. Between these two rollers F F' is placed a third roller H, supported by a sliding frame D, upon which is placed a scale, as seen in Fig. 1. This frame and its roller may

be elevated and depressed at pleasure by means of a screw *d*, passing through the bar J of frame D. Thus the relative positions of the three rollers are changed so as to bend tire to fit wheels of different diameters.

The scale seen in Fig. 1 and the index-bar *c* enable the operator to regulate the curve of the tire, so as to fit any wheel, by bringing the proper figures on the scale to the top of bar *c*.

In constructing my machine I prefer to use iron, except for the sides A, (of the frame,) which are made of planks, say four inches in thickness.

I am aware that a scale is not new in tire-benders, and that rollers are often made adjustable; but I believe my construction and arrangement of tire-benders are in many respects an improvement upon similar machines heretofore known; but I confine my claims to the most important features above described.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The combination of the middle roller H, the sliding frame, the guides, and central screw *d* with the scale, Fig. 1, and index-bar *c*, or its equivalent, substantially as specified.

In testimony whereof I hereunto set my hand.

GABRIEL FARNER.

Witnesses:

G. W. BITNER,
H. B. DAVISON.