W. H. HOUSE.

HORSE-POWER.

No. 188,638. Patented March 20, 1877.

Fig. 1.

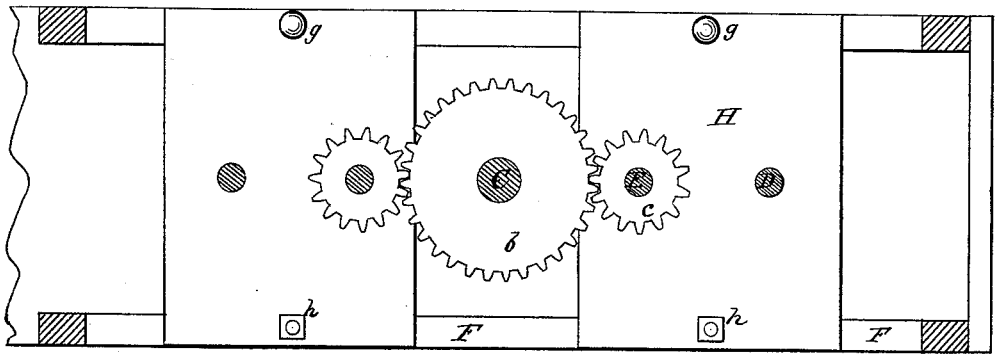
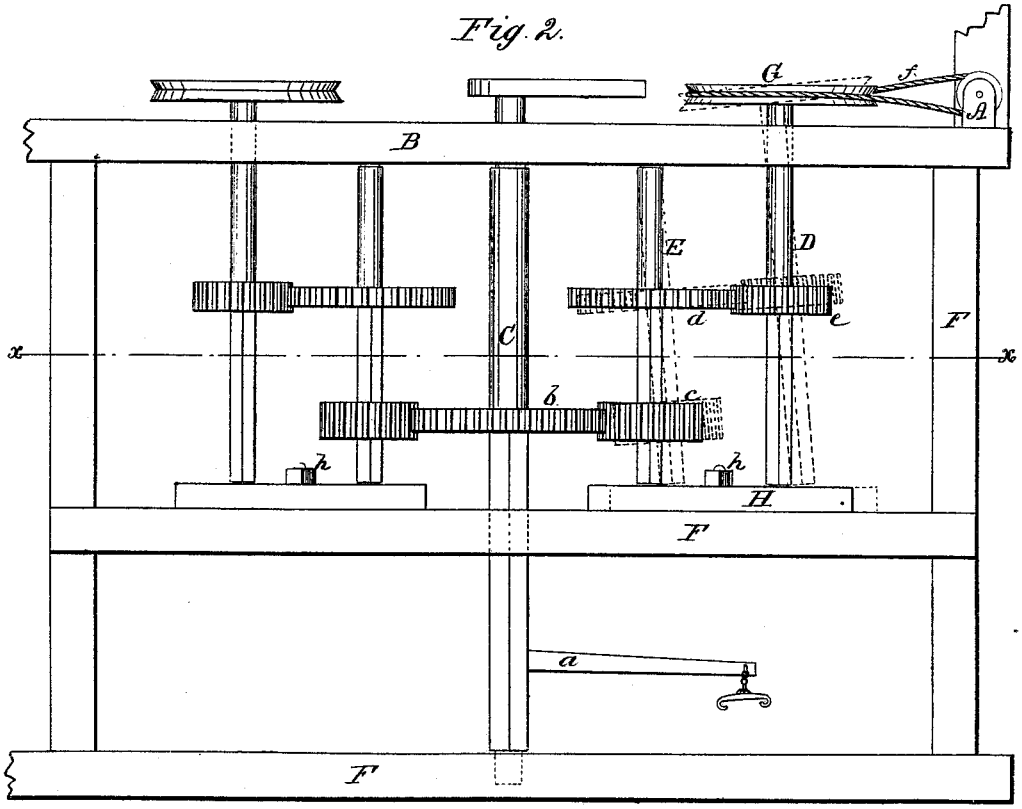


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM H. HOUSE, OF BENNETT'S CROSS ROADS, NORTH CAROLINA.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **188,638**, dated March 20, 1877; application filed February 16, 1877.

To all whom it may concern:

Be it known that I, WILLIAM H. HOUSE, of Bennett's Cross Roads, in the county of Sampson and State of North Carolina, have invented a new and Improved Horse-Power; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object to provide an improved horse-power for operating cotton-gins and other mills. It consists in a certain combination and arrangement of parts, as illustrated in horizontal section, Figure 1, and in elevation, Fig. 2, in the accompanying drawing.

A is the gin-head, which is located in the gin-house, on the floor B thereof, whereas the gearing for operating the gin is mainly beneath the latter. The driving-shaft C, counter-shaft D, and intermediate shaft E are placed vertically parallel, and provided with suitable bearings in frame-work F. The driving-shaft C is provided with the usual form of sweep *a*, and a large toothed gear, *b*, is keyed on the central portion of the shaft. This gear meshes with a pinion, *c*, on the intermediate shaft E, which is connected with shaft D by a like arrangement of spur-gear, *d*, and pinion *e*. The shaft D projects above the floor B of the gin-house, and a band-pulley, G, is fixed thereon, as shown. From this pulley a twisted or crossed belt, *f*, passes around the gin-head A.

It is obvious that the rotation of the driving-shaft C will impart like motion to the shafts E D, and thereby also to the gin-head A.

A like arrangement of gearing may be connected with the driving-shaft on the opposite or left-hand side, as shown in full lines. The lower ends of the shafts D E are stepped in a plate, H, which is supported horizontally in the frame F. Said plate is pivoted at one end, *g*, so that it may be adjusted in the position shown by dotted lines, Fig. 2, to throw the gear *b* and pinion *c* out of mesh, for the purpose of arresting the rotation of the gin-head at any moment when desired. The free end of plate H is secured by a pin, *h*, in either position—that is to say, in the position indicated in full or dotted lines. This gearing may be employed for driving a grist or other mill without in any manner interfering with the operation or function of the gearing which drives the gin.

My improved horse-power may be cheaply constructed, and nearly all its parts are so arranged that they do not take up the space above the floor of the gin-house.

What I claim is—

The vertical driving-shaft C, the pivoted adjustable plate H, and fastening-pin *h*, the counter-shaft D, and intermediate shaft E, provided with the meshing-gears *b d* and pinions *c e*, arranged below the floor B, the band-pulley G, fixed on the shaft E above said floor, the gin-head A, and band *f*, all being combined as shown and described, for the purpose specified.

WILLIAM HENRY his × mark HOUSE.

Witnesses:

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