E. GOLUCKE.
Horse-Power.

No. 207,512. Patented Aug. 27, 1878.

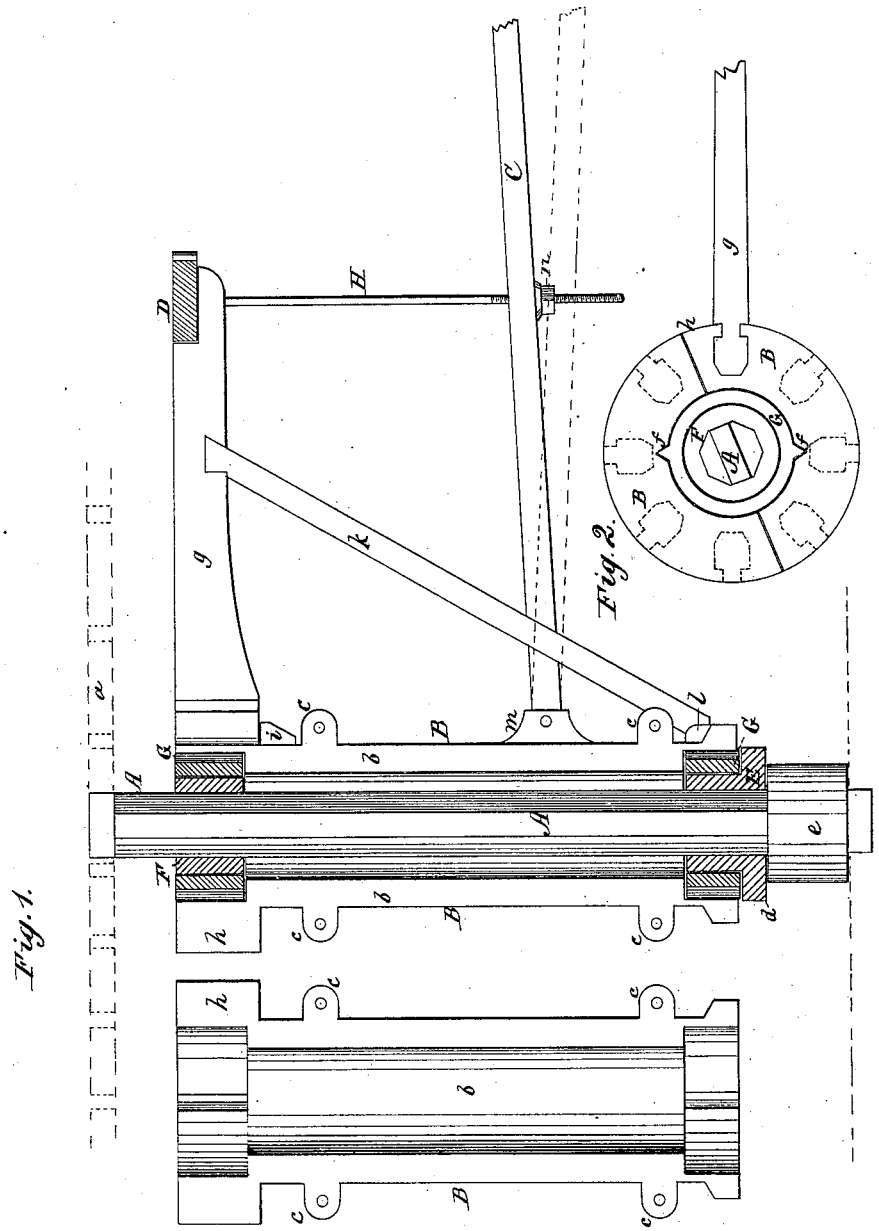

Fig. 1.

Fig. 2.

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UNITED STATES PATENT OFFICE.

EDMUND GOLUCKE, OF CRAWFORDVILLE, GEORGIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES BERGSTROM, OF SAME PLACE.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **207,512**, dated August 27, 1878; application filed August 1, 1878.

To all whom it may concern:

Be it known that I, EDMUND GOLUCKE, of Crawfordville, in the county of Taliaferro and State of Georgia, have invented a new and useful Improvement in Horse-Powers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in stationary horse-powers employed for driving cotton-gin machinery; and it pertains particularly to the construction of the king-post and master-wheel and their appendages. As ordinarily constructed the king-post of such horse-powers is provided with iron gudgeons or end pivots, which work in stationary bearings, and the draft-levers and arms or spokes of the master-wheel are attached directly to the post by tenon and mortise.

An improvement has been made on this construction by which the post proper is greatly reduced in diameter, and is made a stationary support of the gin-house floor, and the draft-levers and spokes of the master-wheel are attached to a cylinder or hollow post, which revolves around the stationary part or king-post proper, as illustrated in Patent No. 153,381.

My invention is a further improvement in the same line; and consists in constructing the cylinder or hollow revolving portion of a king-post in two equal longitudinal parts, so that it may be easily applied to the stationary part of the post after the latter has been set in the required manner, and in applying flanged bushings to the cylinder and fixed collars to the stationary post to support the cylinder and take the wear incident to the revolution of the same, and in the manner of attaching the spokes of the master-wheel and the draft-levers to the cylinder and supporting the latter adjustably at their free ends, as hereinafter described.

In the accompanying drawing, forming part of this specification, Figure 1 is a vertical section of the apparatus, showing the two parts of the hollow post separate and the draft-levers and segment-wheel applied on but one side of the post. Fig. 2 is a plan view.

A indicates the king-post proper; B, the two-part cylinder, which revolves around it; C, a draft-lever, and D a segment of the master or crown wheel. The post A, which is comparatively slender, forms a stationary support for the floor *a* of the gin-house. The cylinder B is divided lengthwise into two equal parts, *b b*, and provided with perforated lugs *c*, through which bolts are inserted to secure the parts *b* together when applied to the post A, as represented in Fig. 1.

A cylindrical collar, E, having a horizontal flange, *d*, is fixed on the post A and supported on a boss, *e*, formed on the lower end of the post. Another collar, F, of like diameter, is fixed on the post A near its upper end. The function of these collars is to furnish bearings for the hollow post or cylinder B and take the wear incident to its revolution around post A. The lower collar, E, also constitutes the support for the hollow post, being adapted for such function by reason of its projecting or lateral flange *d*. The wearing parts or bearings of the hollow post B, that work in frictional contact with collars E F, are two cylindrical bushings, G G, which are of such diameter interiorly as to receive and closely fit the respective collars E F. Said bushings G G are caused to rotate with the hollow post B by means of vertical ribs *f*, which enter corresponding grooves in the post.

In erecting my improved horse-power the stationary post A, with collars E F attached, is first set accurately vertical and firmly secured. The two parts of the cylinder B are then applied to post A, and secured together by bolts inserted through the perforated lugs *c*.

The time and labor required for these operations are much less than for setting the heavy revolving post usually employed or the improved two-part post described in the patent before referred to, and if, at any subsequent time, resetting or reconstruction or repair is requisite it can be easily effected.

The spokes or arms *g* of the master or crown wheel D are attached to the boss or hub *h* of the cylinder B by means of dovetailed tenons, which rest on shoulders *i* projecting from the body of the cylinder. The spokes *g* are supported by braces *k*, which are stepped in a socket, *l*. The draft-levers C (only one of which is shown) enter sockets *m* projecting from the body of the post, and are pivoted thereto by

pins. The outer ends of the draft-lever are supported by rods H, which are pendent from the rim of the master-wheel, and have their lower ends screw-threaded to allow the levers to be adjusted higher or lower by means of screw-nuts *n*, for the purpose of adapting the levers to the proper height for different-sized draft-animals, so that the latter may exert the desired tractive force with the best advantage.

What I claim is—

1. In combination with the vertical stationary post and collars E and F, the former having the flange *d*, the revolving post or cylinder B, made in two longitudinal parts, and having the ribbed bushings G G, the master-wheel, and suitable draft-levers, all as shown and described.

2. The combination of arms *g* with the master-wheel rim and the hollow cylinder having hub *h*, provided with vertical dovetailed mortises or slots, and the shoulders *i* located below said mortises, as shown and described.

3. The combination, with the draft-levers, a revolving post having sockets *m*, and a master-wheel attached to said post, of the vertical adjusting-rods supporting the free ends of said levers, as shown and described, for the purpose specified.

EDMUND GOLUCKE.

Witnesses:
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