

(No Model.)

A. L. GILL.  
THRASHING MACHINE.

No. 408,382.

Patented Aug. 6, 1889.

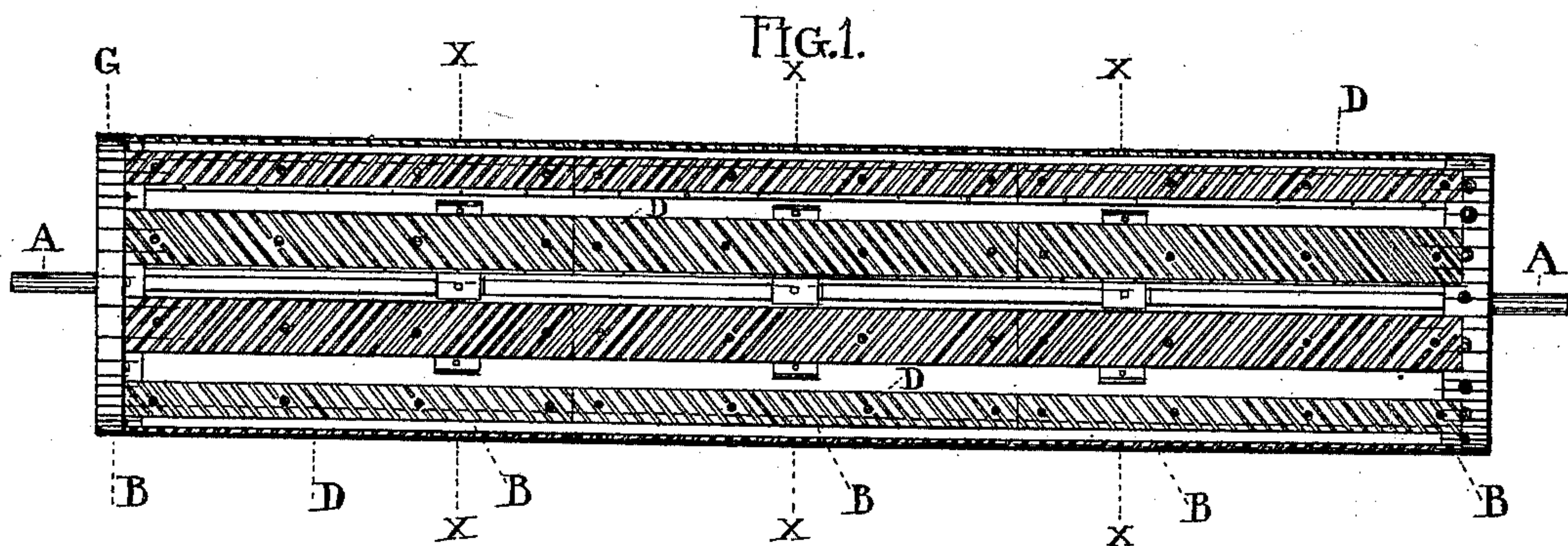


FIG. 2.

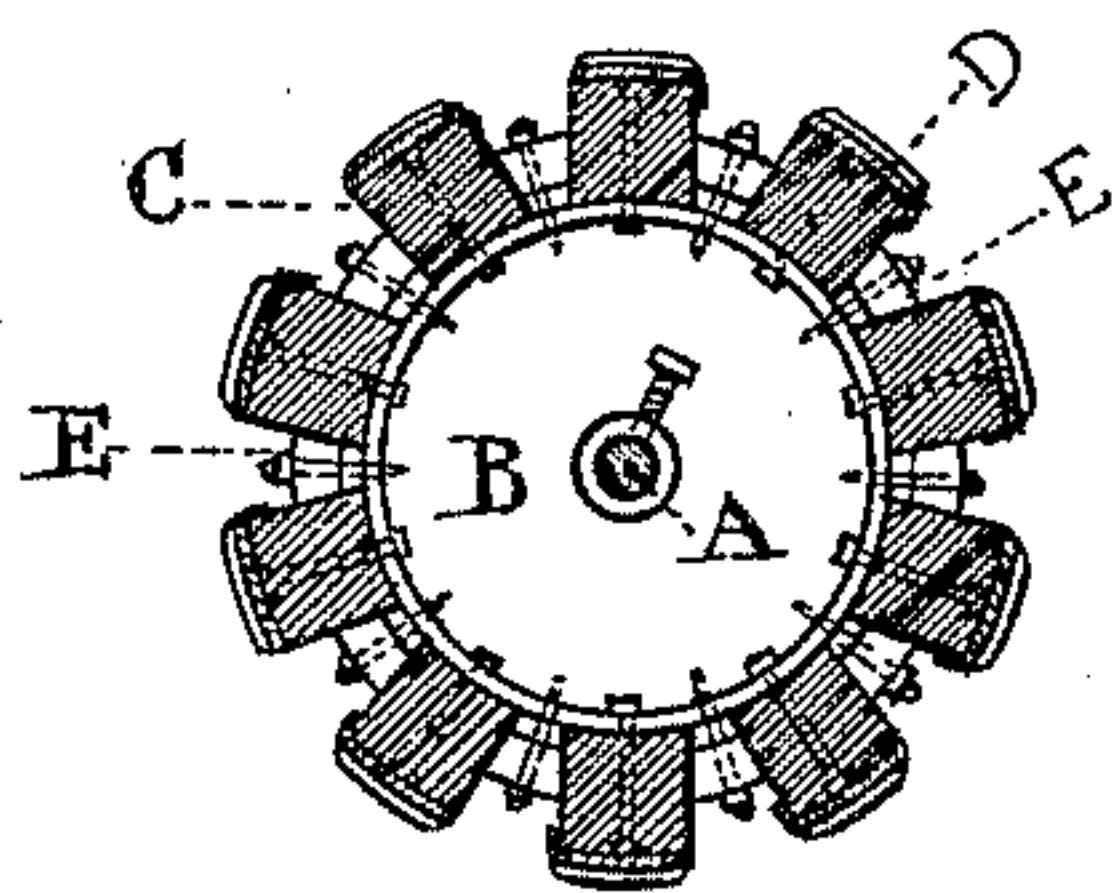


FIG. 3.

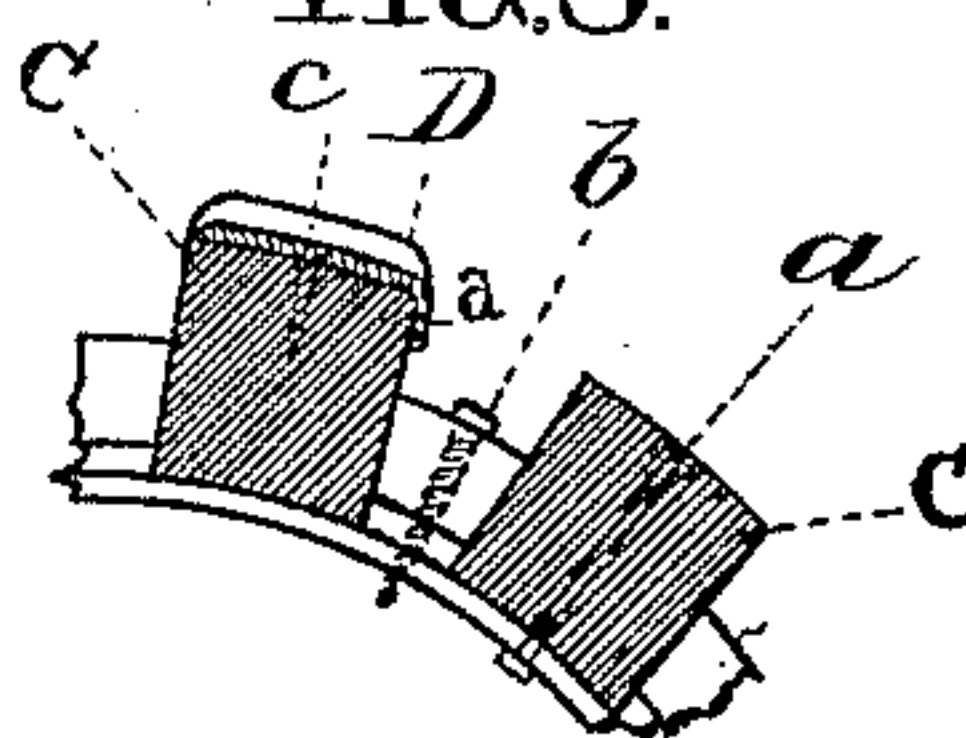
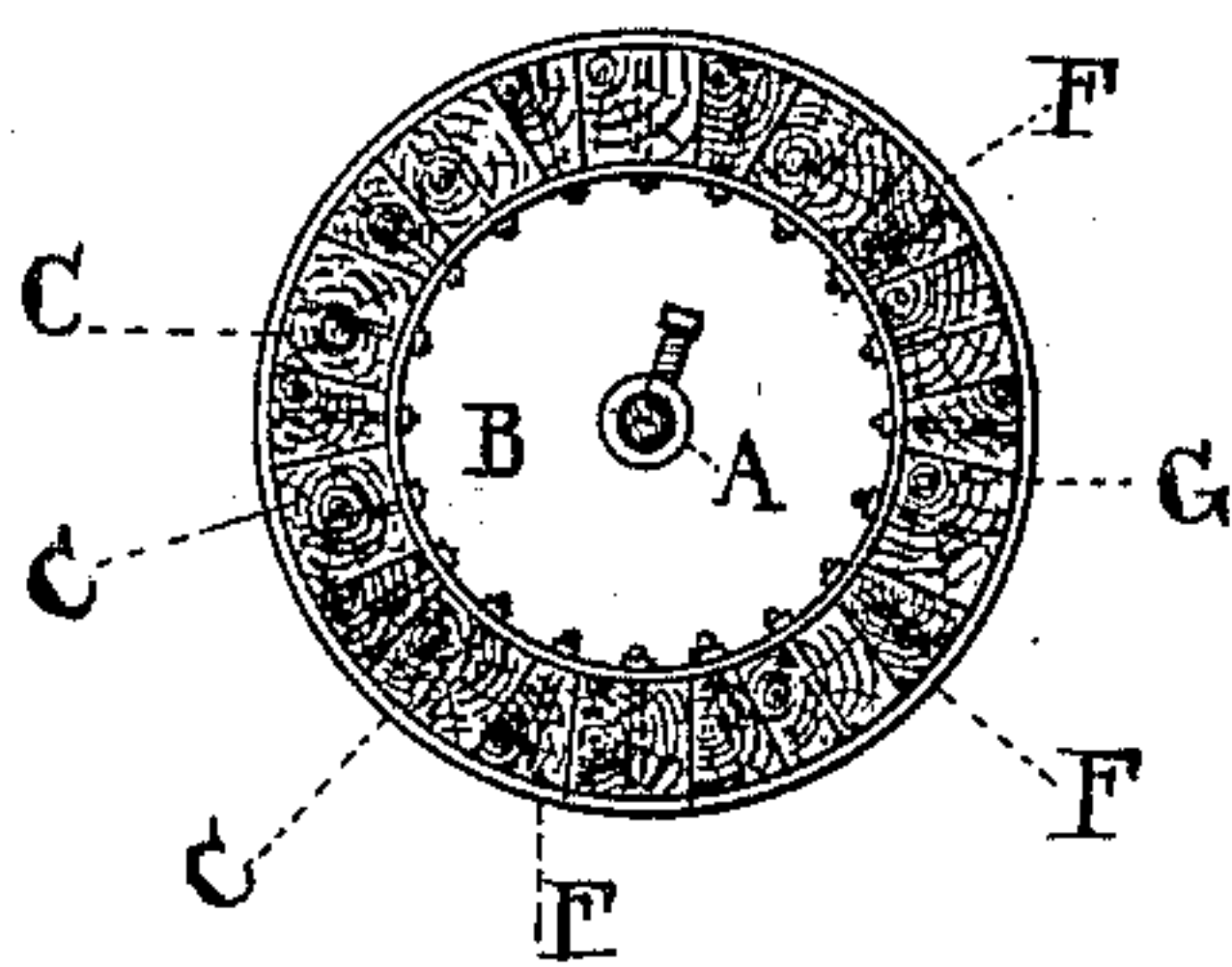


FIG. 4.



WITNESSES.  
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# UNITED STATES PATENT OFFICE.

ALBERT L. GILL, OF ALLENTOWN, NEW JERSEY.

## THRASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 408,382, dated August 6, 1889.

Application filed September 15, 1888. Serial No. 285,539. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT L. GILL, a citizen of the United States, residing at Allentown, in the county of Monmouth, in the State of New Jersey, have invented certain new and useful Improvements in Skeleton Cylinders for Thrashing-Machines, of which the following is a specification.

My invention relates to bar or skeleton cylinders used in thrashing-machines for thrashing or separating the grain from its straw by rubbing the heads of the grain between such cylinder and the concaves of the machine.

In the drawings, Figure 1 is a side view of my improved cylinder. Fig. 2 is a vertical sectional view of the cylinder on the lines  $xx$  in Fig. 1. Fig. 3 is a part of Fig. 2 enlarged to show more clearly the sectional form of the metal ribs or plates, and Fig. 4 is an end view of the cylinder.

A is a shaft which passes through the cylinder, and is mounted upon journals at or near each end thereof, and receives its motion from a pulley thereon connected with the engine or horse-power by a driving-belt.

B B B B B are circular castings used as heads upon which the cylinder is built up.

C C C are square wooden staves mounted at equal intervals upon the heads B, and running from end to end of the cylinder, and bolted firmly to the cylinder-heads by the bolts  $a$ , as shown in Figs. 2, 3, and 4.

D D D are diagonally grooved or ribbed metal plates (made preferably of malleable iron) fastened upon the wooden staves C C C.

E E are metal wedges or keys, made preferably of iron, which are screwed firmly to the flanges of the heads B and securely brace the wooden staves C.

F F F are wooden wedges screwed fast to the flanges of the end heads B B for the same purpose. (See Fig. 4.)

G is a metal band surrounding and binding the wooden staves C at their ends and the wooden wedges F upon the end heads B B of the cylinder. In Fig. 1 the cylinder is shown with one of these bands G in place and the

other removed. The metal wedges E are of such form that when the wooden staves C shrink away from the wedges E and have to depend entirely upon the bolts  $a$  for their support and fastening to the heads B the wedges or keys E may be readily readjusted by tightening the screws  $b$ , which fasten them to the heads B, and the staves C are thus firmly braced again.

The metal ribs used for facing the staves of the cylinder may be grooved on their outer faces, as shown in the drawings, or may be made with a smooth or plain face. Upon one edge of each rib is a flange, (shown in section in Fig. 3,) which partly covers the forward face of the stave C and protects it from wear, and at the same time assists materially in retaining the rib in its place on the stave. The face of the rib is punctured at intervals, and through these perforations screws  $c$  are set to fasten it to the stave C. Similar holes are made in the flange, through which the screws  $d$  are fastened. The rib is thus firmly secured to the stave C.

Having thus described my invention, I desire to claim—

1. A skeleton cylinder for thrashing-machines, consisting of the flanged heads B, longitudinal staves C, connected to said heads and separated from each other by intervening spaces, metallic plates D, fastened to said staves, and adjustable wedge-shaped bracing-blocks E, interposed between the staves and connected to the heads.

2. A skeleton cylinder for thrashing-machines, consisting of heads B, longitudinal wooden staves C, separated from each other by intervening spaces, adjustable wedge-shaped bracing-blocks interposed between the staves and connected to the heads, and metallic facing-plates D, provided with lips or flanges  $d$ , for protecting the forward faces of the staves from wear.

ALBERT L. GILL.

Witnesses:

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THEO. C. MAPLE.