

(No Model.)

2 Sheets—Sheet 1.

W. DOBSON.
CARDING ENGINE.

No. 363,607.

Patented May 24, 1887.

FIG. 1.

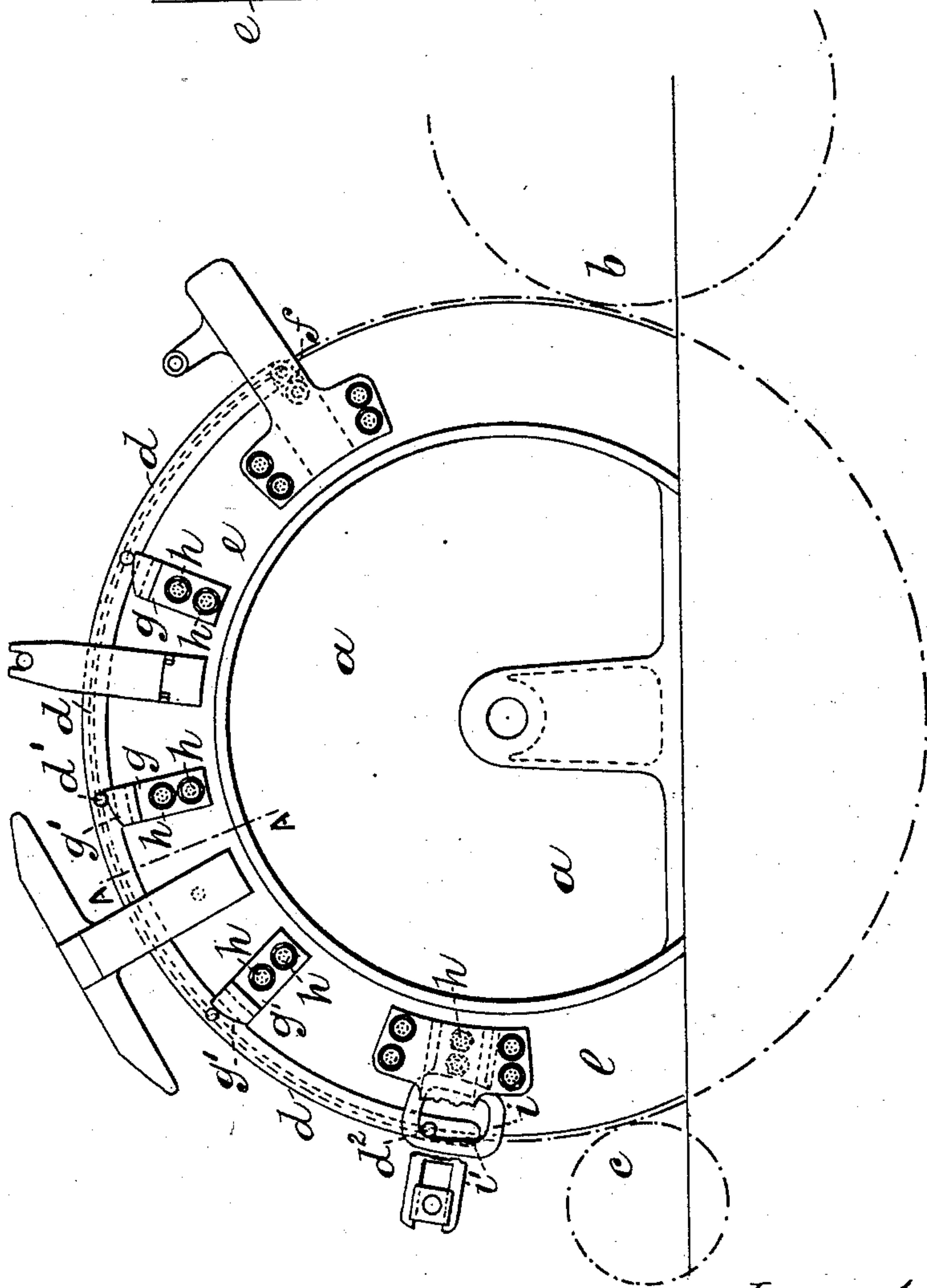
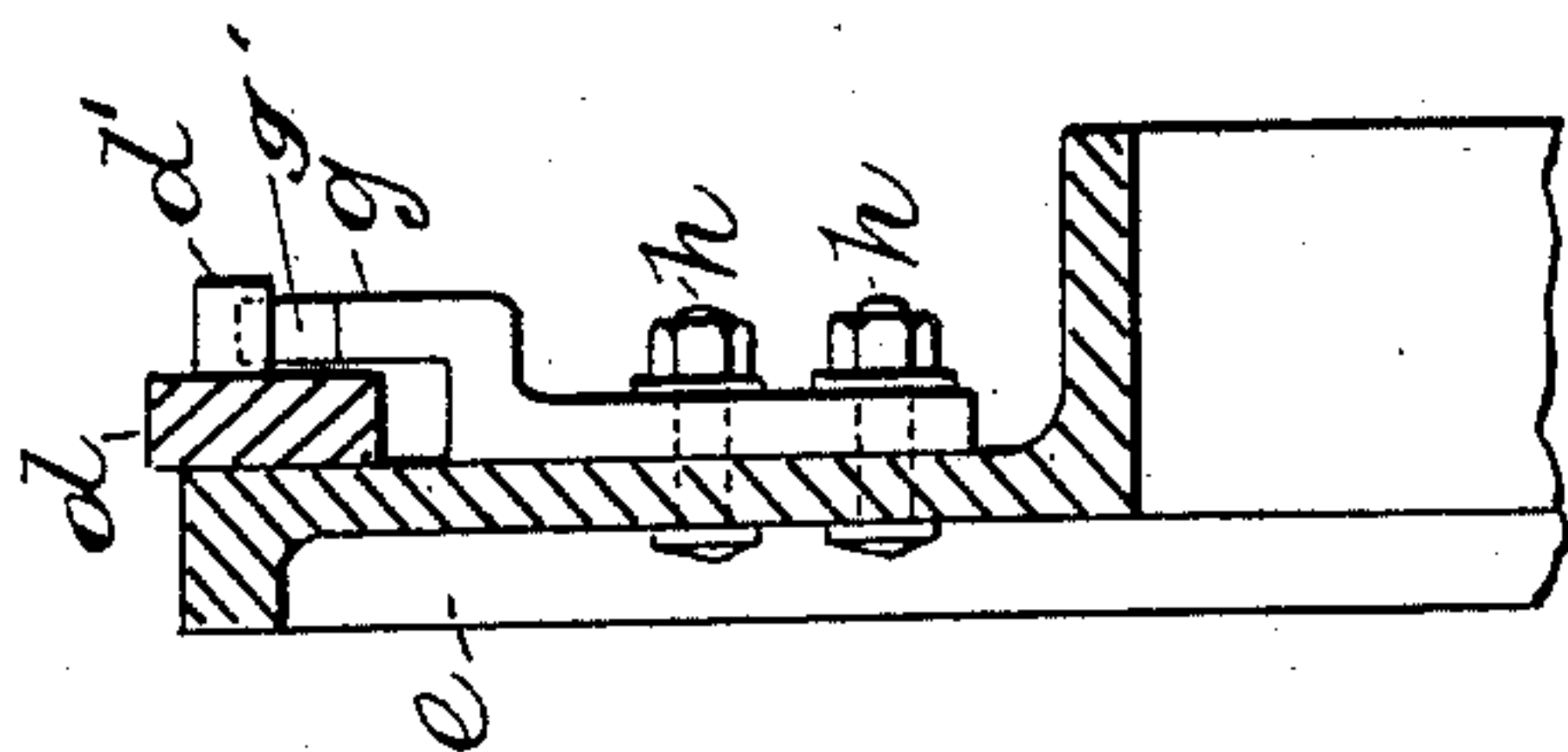


FIG. 2.



Witnesses:
John H. Danner
C. Bridgwick

Inventor:
W. Dobson
By *Munn & Co.*
Attorneys.

(No Model.)

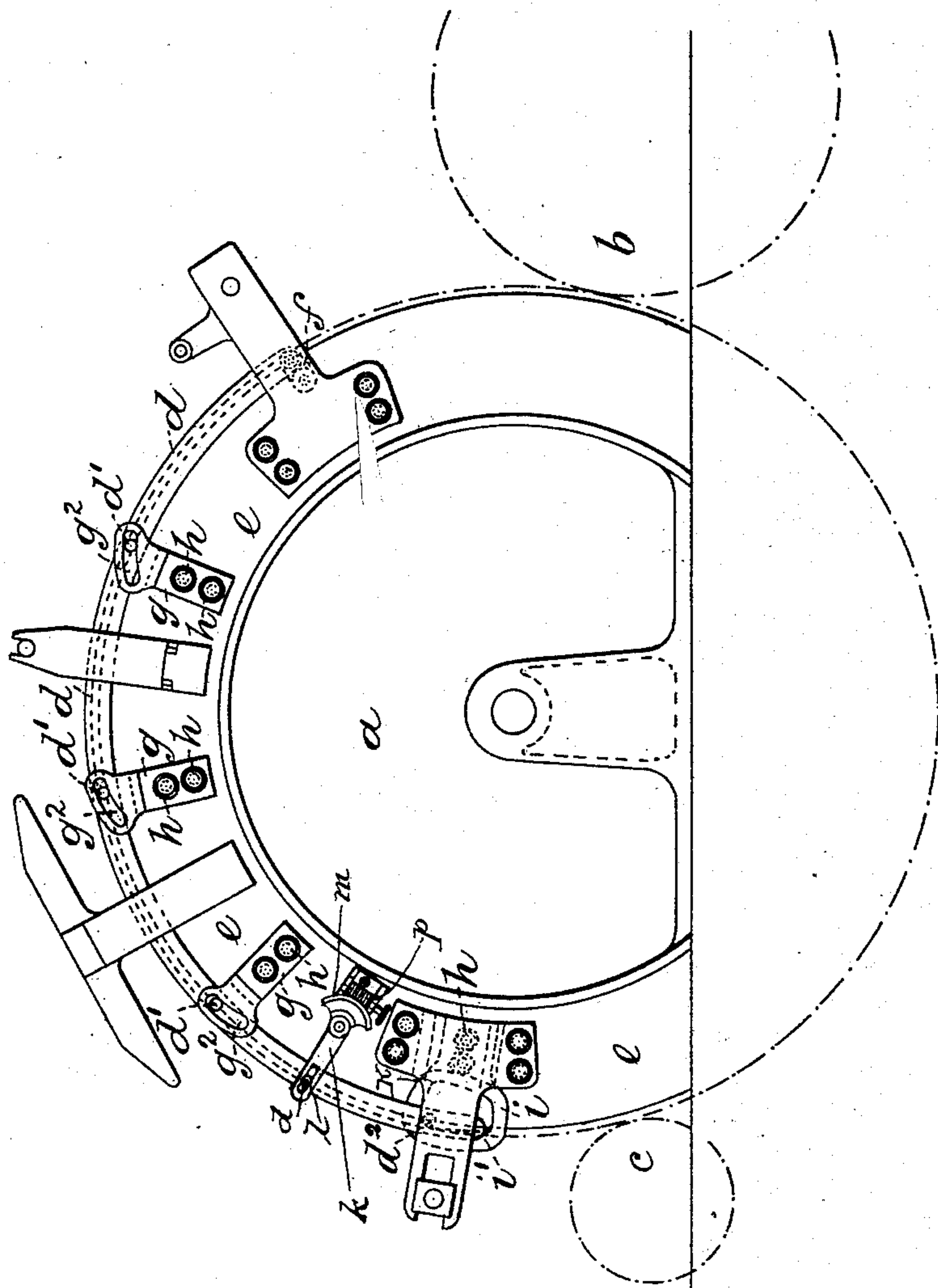
2 Sheets—Sheet 2.

W. DOBSON.
CARDING ENGINE.

No. 363,607.

Patented May 24, 1887.

FIG. 3.



Witnesses:

John H. Deemer
C. Sedgwick

Inventor:

W. Dobson

By Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM DOBSON, OF BOLTON, COUNTY OF LANCASTER, ENGLAND.

CARDING-ENGINE.

SPECIFICATION forming part of Letters Patent No. 363,607, dated May 24, 1887.

Application filed August 18, 1886. Serial No. 211,200. (No model.) Patented in England June 10, 1885, No. 7,068.

To all whom it may concern:

Be it known that I, WILLIAM DOBSON, of Bolton, in the county of Lancaster, England, have invented a new and useful Improvement in Carding-Engines, of which the following is a full, clear, and exact description.

The invention consists in the construction and combination of parts and details, as hereinafter fully described, and particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of part of a carding-engine, illustrating my improved adjustable connection of the flexible bends to the engine bend or frame. Fig. 2 is an enlarged detail cross section on the line A A of Fig. 1. Fig. 3 is a view similar to that of Fig. 1, but showing a slight modification.

a indicates the main cylinder, *e* the "licker-in," and *b* the "doffer" of a carding-engine of ordinary construction.

e is one of the engine-bends which embrace the main cylinder, and to which the flexible bend *d* is pivotally connected at one end by the link *f*. The other end of the flexible bend *d* is provided with a pin, stud, or projection, *d'*, which runs on the curved or inclined outer edge, *i'*, of the slot in a bracket-piece, *i*, secured to the engine-bend *e* by bolts *h*, as shown, or in any other suitable manner.

At intermediate points on its length the flexible bend *d* is provided with studs *d''*, which run on the outer curved or inclined cam-edges *g'* of the bracket-pieces *g*, secured to the bends by bolts *b*, or otherwise. The engine-bend *e* is also provided with the usual bearings for the carrying-rollers of the revolving flats, and with the usual guides for the same. With this arrangement, when the flexible bend *d* is to be set for properly adjusting the flats relatively to the main cylinder *a*, the bend *d* is moved lengthwise, the movement of its ends being controlled by the link *f* and the cam-edge *i'*. For thus moving the flexible bend lengthwise any suitable means may be employed, as that illustrated, consisting of a pivoted lever, *k*, having a slot in one end, in which a stud, *l*, on the flexible bend rides, and provided with a gear-segment, *m*, on the other

end, engaged by a worm, *p*, for moving the lever, which mechanism, however, forms no part of this invention. The position of its intermediate points is governed by its studs moving on the fixed cam-pieces *g* on the engine-bend *e*, so that the flexible bend will remain concentric with the main cylinder into whatever position it may be adjusted. After adjustment the flexible bend may be held in position by any suitable means.

In Fig. 3 the construction is the same, except that the intermediate studs *d'* ride in slots *g''* in the cam-pieces *g*, instead of running on outer cam-edges on the same. In this case, when the flexible bend is moved lengthwise, the adjusting action is positive both toward and from the engine-bend.

In some cases the cam-pieces *g* *i* may be formed integrally with the engine-bend *e*.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a carding-engine, the combination, with the engine-bend and the flexible bend movable lengthwise, of cams and pins or projections running on the same, by which the flexible bend when so moved is automatically adjusted, and a pivoted link connecting the end of the flexible bend with the engine-bend, substantially as shown and described.

2. In a carding-engine, the combination, with the engine-bend and slotted bracket-pieces fixed thereto, of the movable flexible bend having pins or projections riding in said slots, and adjusted positively thereby toward and from the engine-bend, substantially as shown and described.

3. In a carding-engine, the combination, with the engine-bend, the flexible bend movable lengthwise, and cams and pins or projections running on the same for adjusting the flexible bend, of a slotted bracket-piece on the engine-bend and a pin or projection on the end of the flexible bend riding in the slot, substantially as shown and described.

WILLIAM DOBSON.

Witnesses:

R. M. DOBSON,
Plymouth.

A. A. WOODS,
Dublin.