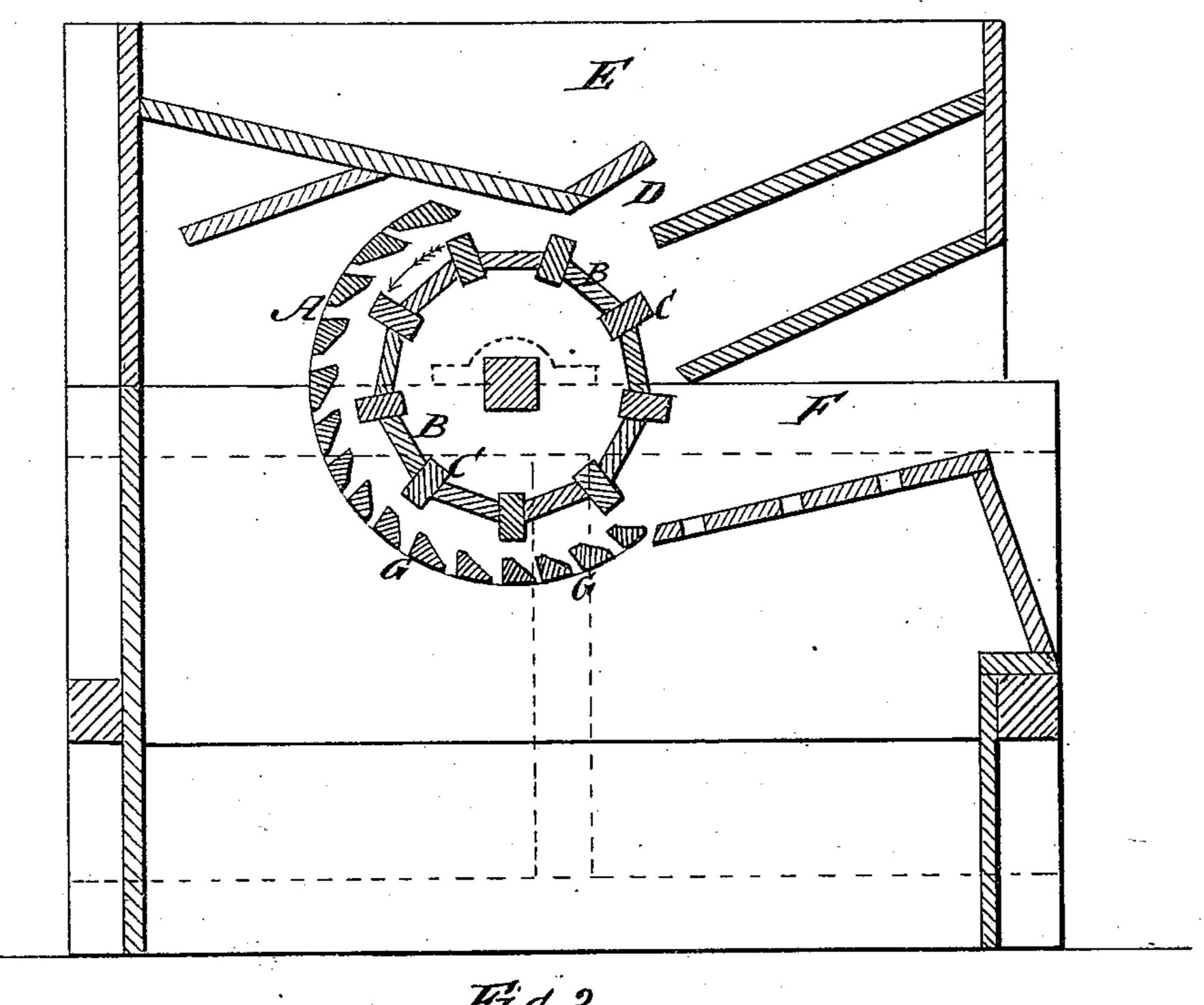
## J. A. BOWERS & M. ADAR.

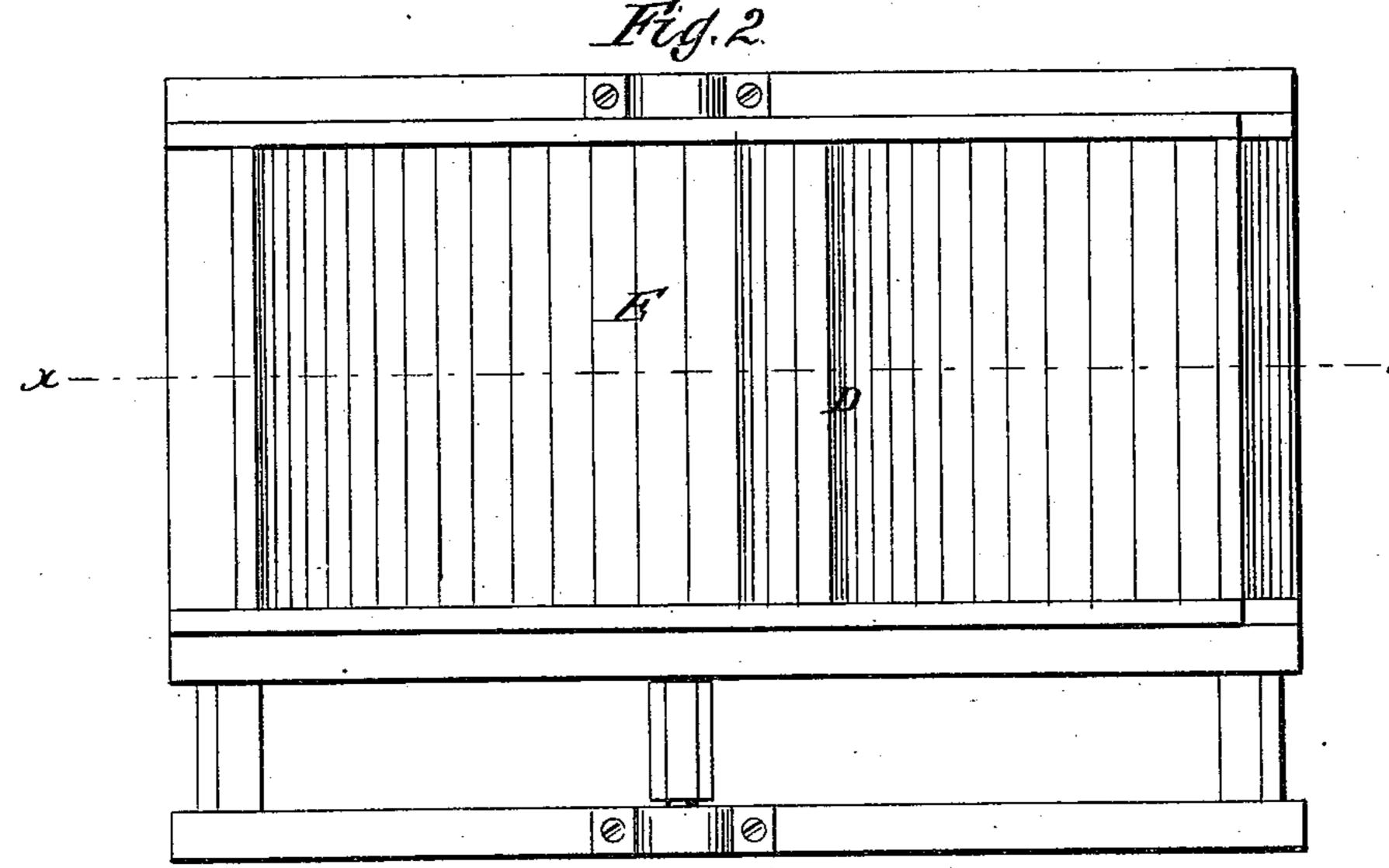
COTTON-CLEANER.

No. 186,981

Patented Feb. 6, 1877.

Fig.1.





WITHESSES:

John Goethals.

Jan Colar

ATTORNEYS.

## UNITED STATES PATENT OFFICE.

JAMES A. BOWERS AND MILTON ADAR, OF PRINCETON, ARKANSAS.

## IMPROVEMENT IN COTTON-CLEANERS.

Specification forming part of Letters Patent No. 186,981, dated February 6,1877; application filed May 22, 1876.

To all whom it may concern:

Be it known that we, James A. Bowers and Milton Adar, of Princeton, in the county of Dallas and State of Arkansas, have invented a new and Improved Cotton Cleaner, of which the following is a specification:

Our invention consists of a slotted and ribbed stationary concave and a revolving cylinder with beaters, combined with a feeding and discharging case, in which the cotton feeds from a hopper at the top and escapes at the side, while the dirt and trash which are beaten out of the cotton by the beater-cylinder and ribbed concave fall through the spaces and escape.

Figure 1 is a sectional elevation of our improved cotton - cleaner, and Fig. 2 represents a top view.

A is the stationary slatted and ribbed concave; and B is the rotary cylinder with beaters C, to which the cotton is fed through throat D from a hopper, E, and from which it escapes through the passage F, while the dirt and trash escape through the spaces G.

The machine is designed to clean the cotton,

preparatory to ginning it, of the stems and other trash sometimes mixed with it when coming from the field.

The cotton passes from hopper E through throat D, is seized by the rotary beaters on wheel B, and carried, in the direction indicated in the drawings, percussively against the ribs of concave, the rotary beaters serving to force a current of air through the throat F and slots G. By this construction the dust and dirt are very thoroughly removed from the cotton.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of ribbed concave, having spaces G, rotary cylinder, having beaters C, the throats F D, and the hopper E, all arranged substantially as and for the purpose specified.

JAMES A. BOWERS. MILTON ADAR.

Witnesses:
M. M. DUFFIE,
WM. M. OVERMAN.