

(No Model.)

I. F. BROWN.
BRUSH CYLINDER FOR COTTON GINS.

No. 401,124.

Patented Apr. 9, 1889.

Fig. 1

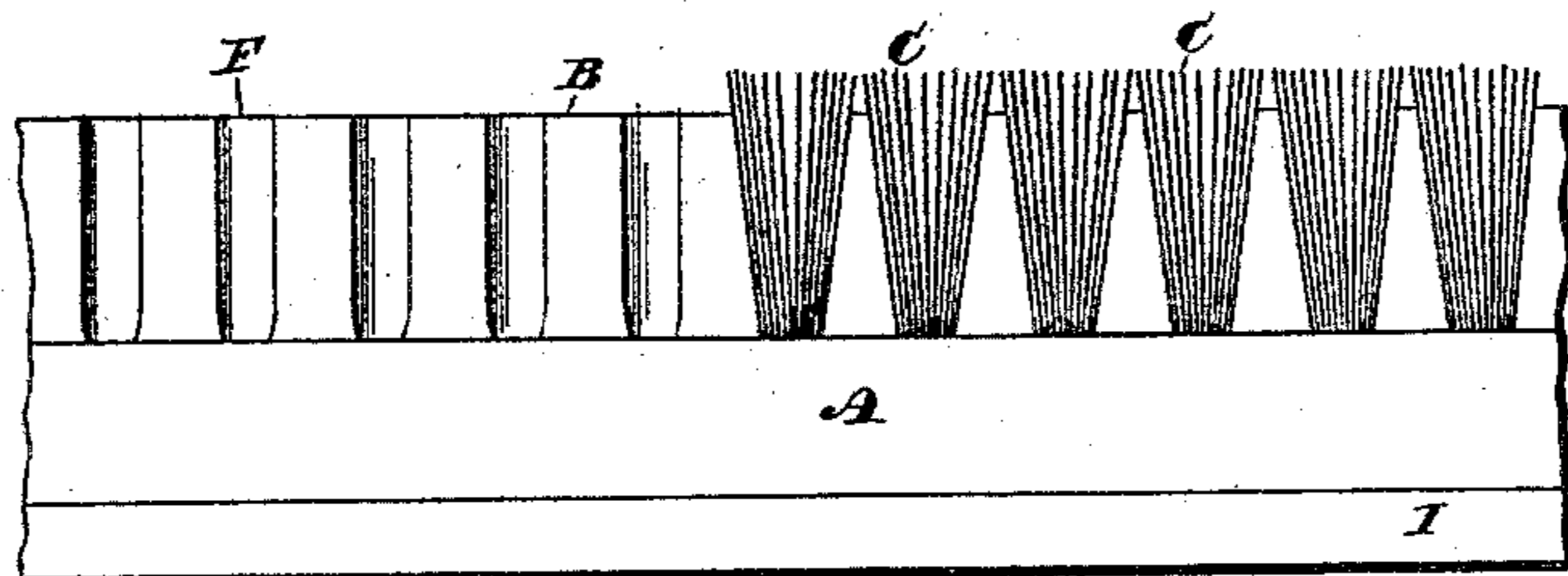


Fig. 2

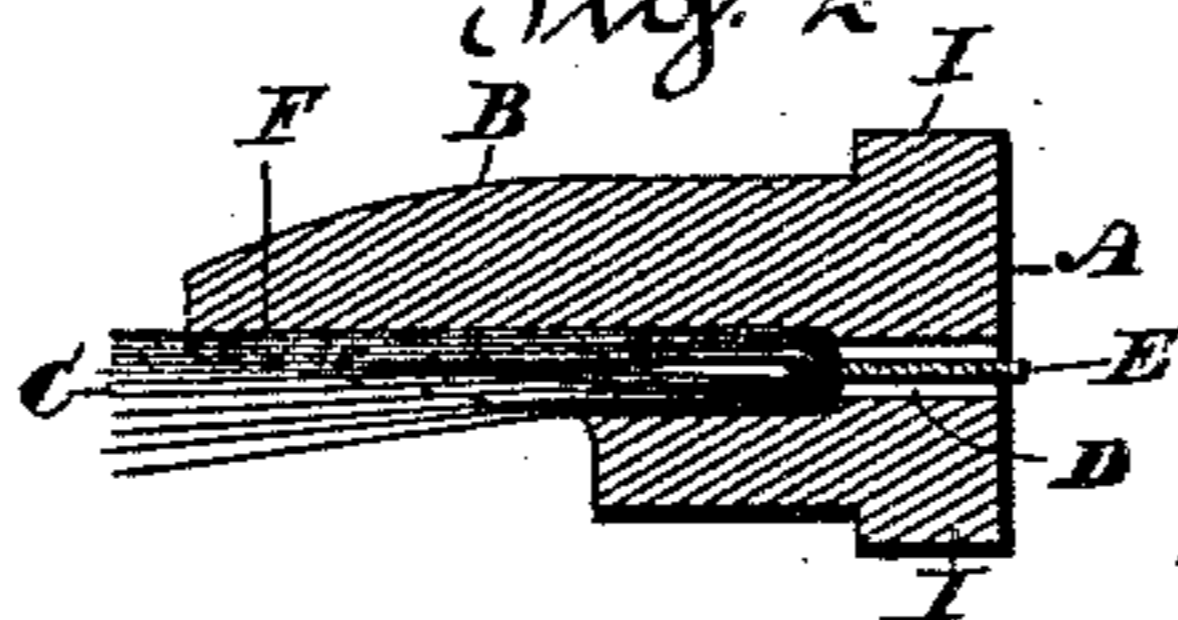
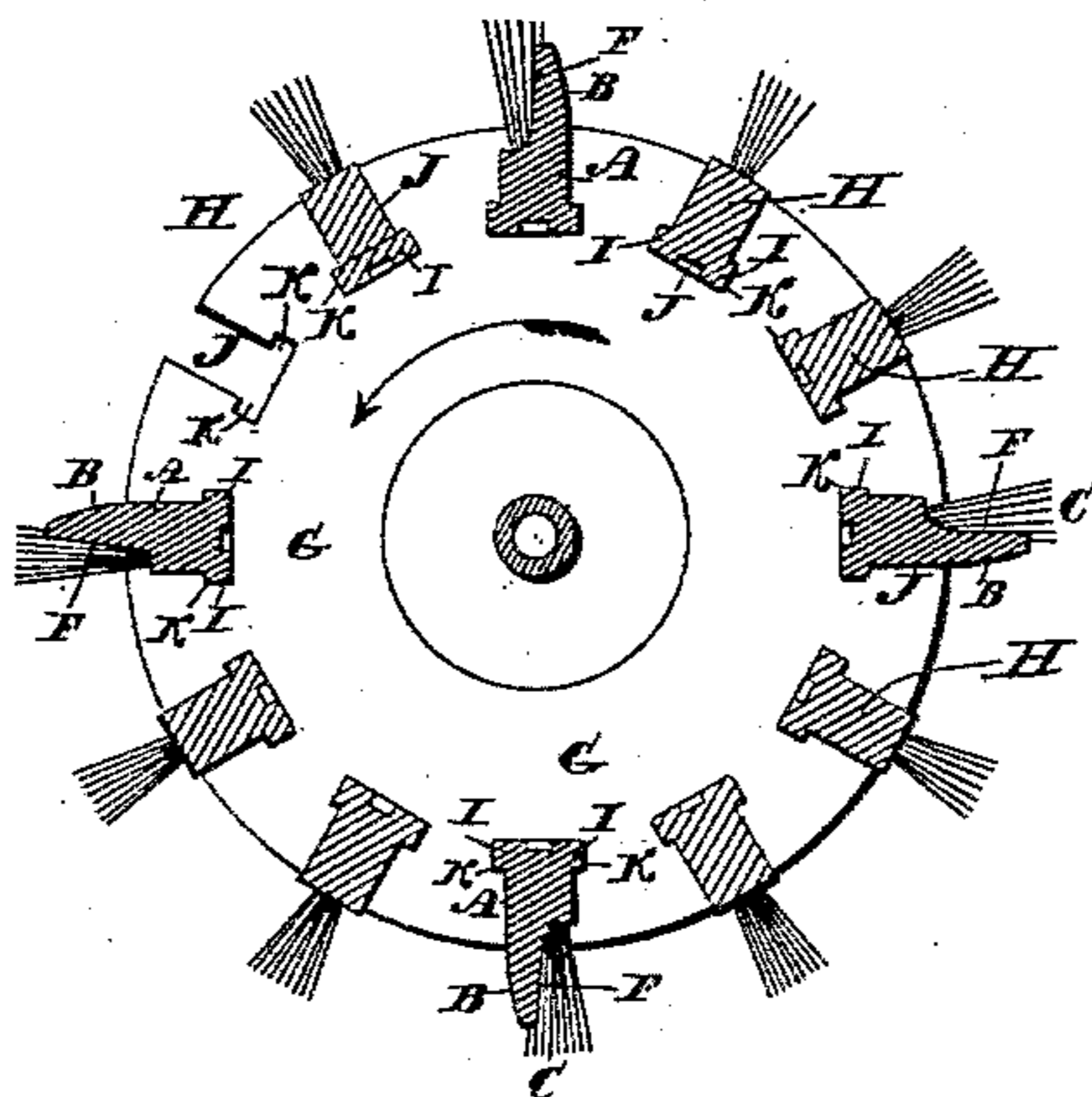


Fig. 3



Witnesses:
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UNITED STATES PATENT OFFICE.

ISRAEL F. BROWN, OF NEW LONDON, CONNECTICUT.

BRUSH-CYLINDER FOR COTTON-GINS.

SPECIFICATION forming part of Letters Patent No. 401,124, dated April 9, 1889.

Application filed June 7, 1888. Serial No. 276,308. (No model.)

To all whom it may concern:

Be it known that I, ISRAEL F. BROWN, residing at New London, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Brush-Cylinders for Cotton-Gins; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in cotton-gins, the object being to improve the durability and efficiency of the brushes employed to remove the lint and gum from the saws.

With these ends in view my invention consists in certain details of construction, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in inside elevation of a portion of a bristle-holder embodying my invention. Fig. 2 is a view thereof in transverse section, and Fig. 3 is a view in end elevation of a brush-cylinder made under my improvement.

As herein shown, the bristle-holder A consists of a long strip of wood, having a flange or lip, B, made integral with it, and extending outward from one of its outer edges on one side and nearly to the ends of the bristles C, which lie against it and are thus re-enforced and virtually stiffened, the flange being located directly back of the bristles, which are supported from their extreme inner ends to a point near their outer ends. The bristles are made up in tufts in the ordinary way and drawn into holes D, formed in the holder, in which they are secured by a binding-cord, E, as shown. The flange is thicker at its base than at its outer edge, having its inner face beveled and provided with grooves F, corresponding to the holes D and receiving the bristle-tufts, and thereby preserving the shape of the same. These bristle-holders are mounted in the periphery of a cylinder, G, of any approved construction, and rotating in the direction of the arrow shown on the drawings. They are arranged singly between groups of two or more bristle-holders, H, carrying unsupported bristles.

It will be generally sufficient to provide a cylinder with four of my improved bristle-holders. Their number will, however, be de-

termined by the character of the work to be done by the gin.

As herein shown, and preferably, the bristle-holders are provided on their inner sides with ribs I I, and are adapted to be slipped endwise into slots or grooves J, formed in the cylinder and undercut at their inner corners, as at K K, to receive the ribs I I of the bristle-holders, whereby the latter are firmly held in place.

The bristles of a holder made under this invention are so stiff that they readily clean the gum from the saws, and so make the gin run freely and easily and do good work.

I am aware that it is not new to secure a thin strip of metal to the back of a bristle-holder for cotton-gins, such strip being out of contact with the bristles and affording them no support when they are doing their work, but only when they are bent way back by the air-currents created by the rotation of the brush-cylinder, and then only at their extreme outer ends, their inner ends receiving no support from the strip whatever.

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

1. The combination, with a bristle-holder for cotton-gins, consisting of a long piece of wood having a flange or lip, B, made integral with it and extending outward from one of its outer edges, of bristles arranged to lie directly against such flange or lip from their inner ends to a point near their outer ends and normally supported and stiffened by it, substantially as set forth.

2. The combination, with a bristle-holder for cotton-gins, consisting of a long strip of wood having a flange or lip, B, made integral with it extending outward from one of its outer edges and having its inner edge beveled and laterally grooved, of bristles located in the lateral grooves in the flange or lip of the holder and supported from their inner ends to a point near their outer ends, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ISRAEL F. BROWN.

Witnesses:

E. T. BROWN,
GEORGE COLFAX.