No. 675,000. Patented May 28, 1901.

S. K. DENNIS.

CANVAS FOR GRAIN BINDERS.

(Application filed Feb. 26, 1900.)

(No Model.)

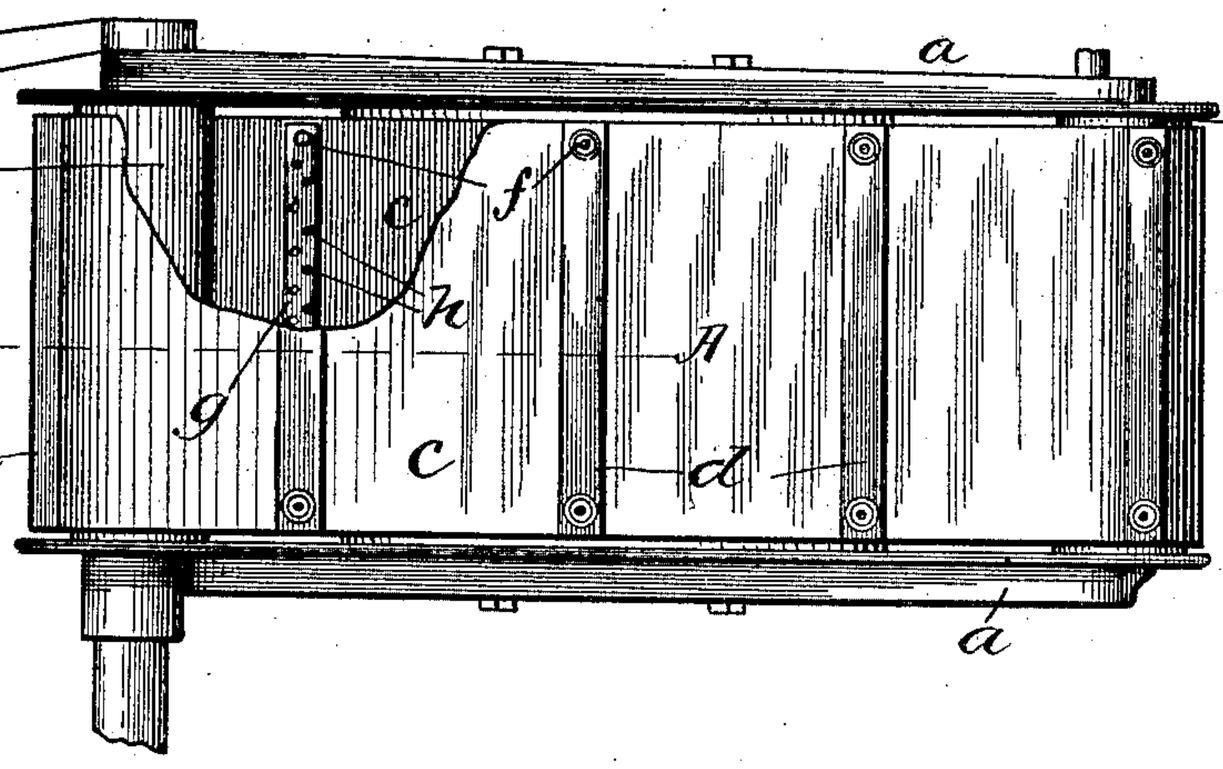

Fig 1

Fig 2

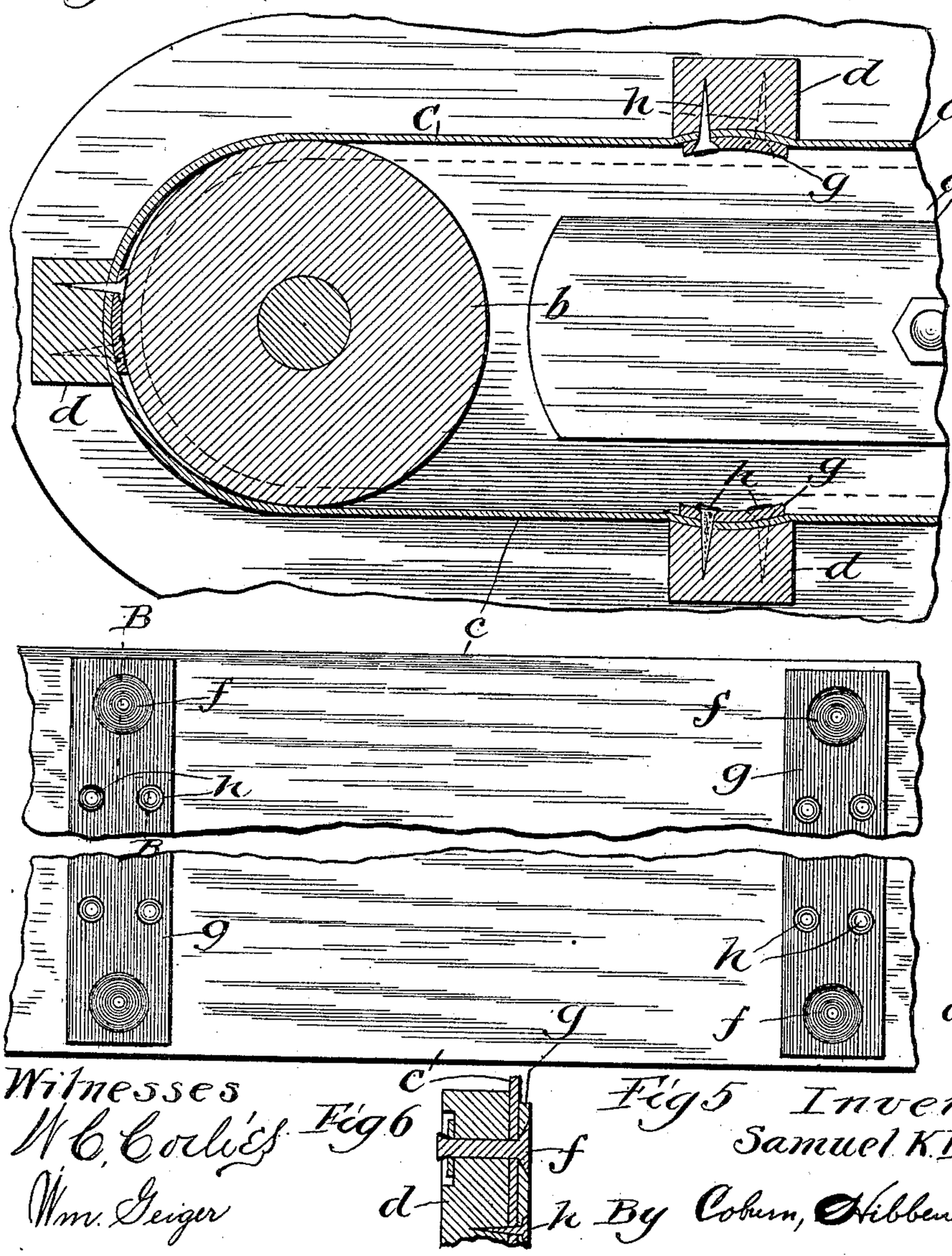

Fig 3

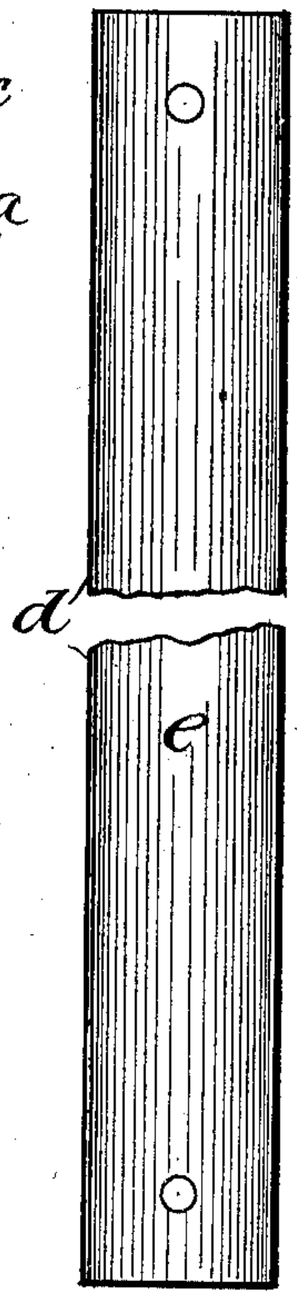

Fig 4

Witnesses
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Fig 6

Fig 5

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UNITED STATES PATENT OFFICE.

SAMUEL K. DENNIS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE PLANO MANUFACTURING COMPANY, OF SAME PLACE.

CANVAS FOR GRAIN-BINDERS.

SPECIFICATION forming part of Letters Patent No. 675,000, dated May 28, 1901.

Application filed February 26, 1900. Serial No. 6,636. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL K. DENNIS, a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Canvas for Grain-Binders, of which the following is a specification.

My invention relates to the construction of the canvas and slats for grain-binders, and is designed to produce a specific construction in which the tendency of loose straw to get in between the canvas and the slats will be entirely obviated. I have shown my invention as applied to the canvas of the butt-adjuster, where it is most advantageous; but it will be understood that it may be employed in any other canvas where the same difficulty arises. As these slats have been hitherto placed on canvas they have simply had flat surfaces next to the canvas and have been bolted thereto. As the slats pass around the rollers it will be evident that with this construction the canvas will be separated from the slat to a slight extent on account of the inability of the slat to accommodate itself to the curve of the roller, which the canvas can readily do. As this separation takes place as the slat passes around the roller, it will be apparent that loose grain can get in between the slat and the canvas and that as soon as the roller is passed the canvas once more coming in contact with the roller will close on the grain that may have gotten between the canvas and slat and hold it, thus causing the gathering of the straw to the great detriment of the work of the machine. To remedy this difficulty, I form the under sides of the slats with a concave surface corresponding to the curvature of the rollers about which the canvas passes and fasten the canvas thereto, preferably by means of a strap extending the length of the slat and which is securely nailed thereto, so as to reinforce the convas at this point and further assist to prevent the possible separation of the slats and the canvas at their edges.

Referring to the accompanying sheet of drawings, in which the same letters of reference are used to designate identical parts in all the views, Figure 1 is a side elevation of a butt-adjuster the canvas of which is constructed according to my invention and a portion of which is broken away to more clearly disclose the structure. Fig. 2 is a detail view, on a larger scale, in section on the line A A of Fig. 1. Fig. 3 is an inverted plan view of one of the slats. Fig. 4 is an end view of the same. Fig. 5 is a plan view of the under side of the canvas, showing especially the reinforcing-strips; and Fig. 6 is a detail view in section on the line B B of Fig. 5.

The framework *a* of the butt-adjuster may be of any desired construction, as the invention is not concerned with that portion of it. The rollers *b b* are likewise of the customary sort and are journaled to rotate in the ends of the framework. The canvas *c* is of the ordinary construction, except as to the slats and the method of attaching them, which is as follows: The slats *d* have their under sides *e* curved, as shown in Figs. 2 and 4, upon an arc that corresponds substantially with the arc of the periphery of the rollers *b*, and if the canvas *c* were simply bolted or riveted thereto, as by the use of the rivets *f*, (shown in Fig. 6,) in the ordinary manner this construction alone would serve to obviate almost entirely the possible separation of the canvas and slats mentioned above. To more thoroughly obviate this and to reinforce the canvas and provide for any wear, I preferably employ the reinforcing-strips *g*, which, as will be seen from the sections in Fig. 2, consist of thin strips substantially the length of the slat and curved on the same arc as the under side of the slat. I preferably form these strips *g* of leather and secure them to the slat by the nails *h*, which pass through the strip and canvas and into the slat. These nails, which I preferably arrange in a double row, serve to cause the strip to fit up tightly in the curved under side of the slat and also assist the rivets *f* in holding the slat to the canvas.

While I have shown my invention as embodied in the form which I at present consider best adapted to carry out its purposes, it will be understood that it is capable of some slight modifications and that I do not desire to be limited in the interpretation of the following claim except as may be necessitated by the state of the art.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

In a device of the class described, the combination of the rollers *b*, with the canvas *c* having the slats *d* thereon, whose under surfaces are concave on substantially the same curve as the peripheries of the rollers, and a reinforcing-strip of flexible material having its outer side curved on the same arc and secured through the slats to said canvas, substantially as and for the purpose described.

SAMUEL K. DENNIS.

Witnesses:
E. J. TAYLOR,
J. F. ADAMS.