

(No Model.)

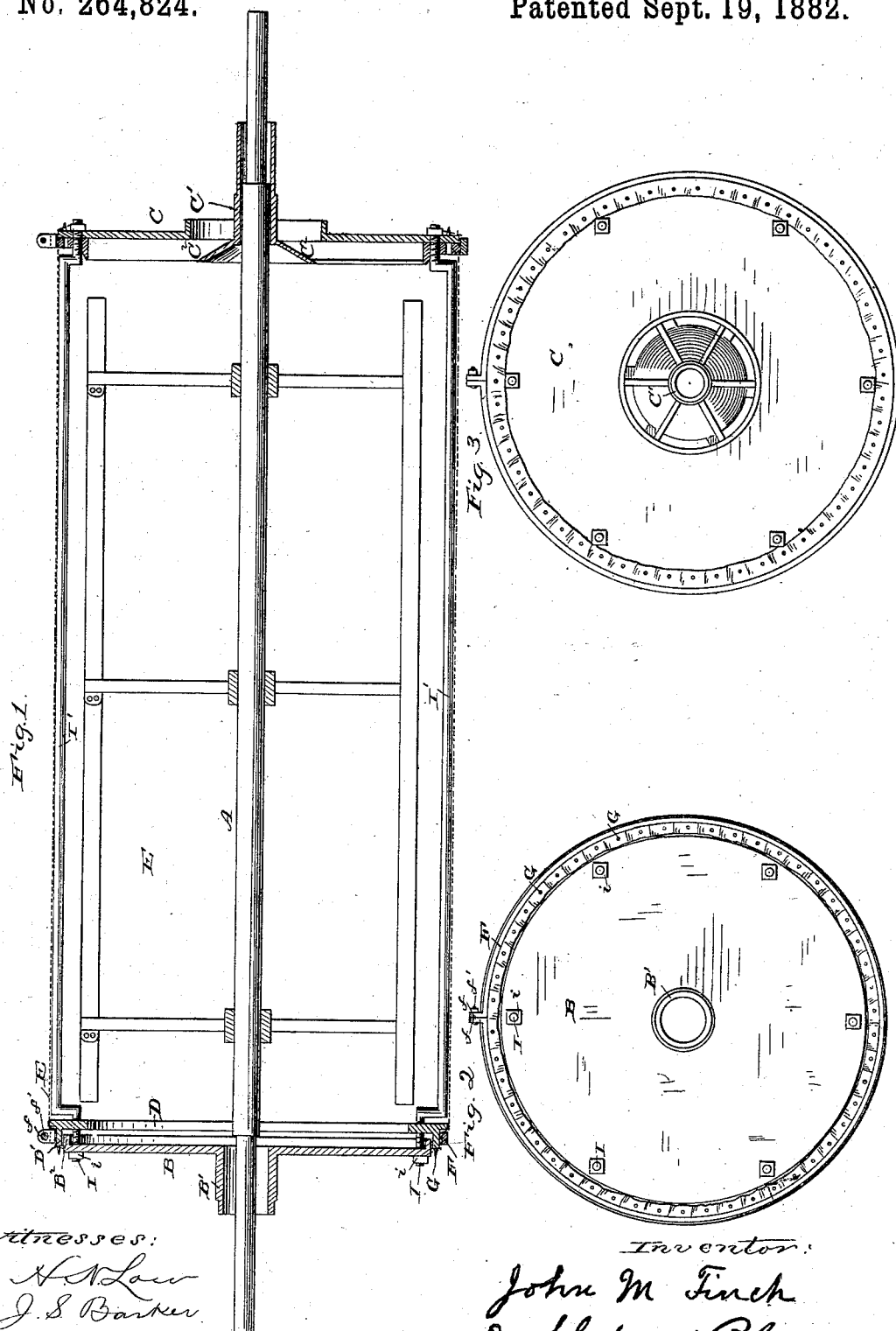
2 Sheets—Sheet 1.

J. M. FINCH.

BOLTING REEL.

No. 264,824.

Patented Sept. 19, 1882.



Witnesses:

H. A. Law
J. S. Barker

Inventor:

John M. Finch
by Doubleday & Bliss

attys.

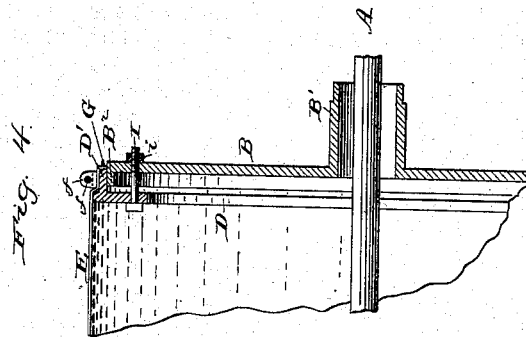
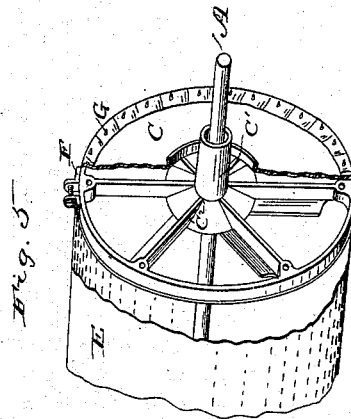
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2 Sheets—Sheet 2.

J. M. FINCH.
BOLTING REEL.

No. 264,824.

Patented Sept. 19, 1882.



Witnesses:

H. N. Low
J. S. Parker

Inventor:

John M. Finch
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UNITED STATES PATENT OFFICE.

JOHN M. FINCH, OF JACKSON, MICHIGAN, ASSIGNOR TO THE GEORGE T. SMITH MIDDINGS PURIFIER COMPANY, OF SAME PLACE.

BOLTING-REEL.

SPECIFICATION forming part of Letters Patent No. 264,824, dated September 19, 1882.

Application filed August 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. FINCH, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Bolting-Reels, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a longitudinal section of a reel having combined therewith my improved cloth-fastening devices. Fig. 2 is an elevation from the head end. Fig. 3 is an elevation from the tail end. Fig. 4 is a section of a part of the head end of a slightly-modified construction. Fig. 5 is a perspective of the tail end.

The device for stretching and fastening the cloth to which this invention appertains can readily be applied to bolting-machines varying more or less in the details of their construction from the minor parts of the reel herein shown.

The reel shown in the drawings has a central shaft, A, a plate or disk, B, at the head end, and a plate or disk, C, at the tail. It is mounted by means of trunnions B' at the head end and C' at the tail, the trunnion B' being formed, preferably, internally with the head-disk B, and the trunnion C' being formed with the hub and spokes C² at the tail of the reel. By means of these trunnions the reel is supported in its bearings independently of the central shaft, A, which latter carries the beater-blades inside of the reel, the shaft being thus permitted to move much faster than the cloth part, the differential speed being attained by any preferred mechanism.

B² is an inwardly-turned flange at the edge of the plate or disk B at the head.

D is a ring situated a short distance inside of the disk B, and formed with or having attached thereto an outwardly-turned flange, D', adapted to overlap the flange B², the latter forming a bearing for the supporting-ring D.

E represents the bolting-cloth. It is drawn over the periphery of the ring D, and also over the flange D', and after which it is clamped.

F is a clamping band or ring on the outside of the flange D', adapted to grip the cloth tightly against the flange and ring and hold it firmly in position upon them.

Much trouble has been heretofore experienced in putting the bolting-cloth upon the supports commonly used, owing to the absence of holding devices adapted to grasp it while

the clamping-ring was being applied or adjusted. To overcome this difficulty I have devised a simple but efficient means for holding the cloth, regardless of the clamping-band, so that the latter can be removed or adjusted without danger of the cloth slipping off from the ring D.

G G are tenter-hooks fastened to the ring D or the flange D', preferably being attached to the edge of and extending backwardly from the latter. The end or edge of the bolting-cloth is caused to engage with these hooks by passing the latter through it. After the cloth is thus fastened the clamping band or ring F is secured in place by means of the ears *ff* and a joining-bolt, *f'*.

I I are bolts passing through both the disk B and the ring D, they having nuts *ii* upon the outside of the disk, by which the ring can be drawn outward when it is desired to tighten the bolt-cloth.

It will be seen that the ring D forms substantially an adjustable head for the cloth-portion of the reel; but I do not limit myself to the exact form of head shown, as the invention can be readily carried out without varying essentially from said form.

The tenter-hooks G are preferably of the form shown—that is to say, of the form of small points; but, as will be seen, these two can be modified in many obvious ways. At the tail end of the reel the tenter-hooks may project directly from the outer face of the disk C, as shown in Fig. 3.

The bolts I are shown in Fig. 1 as being parts of the longitudinally-peripheral cloth-supporting ribs I'. In Fig. 4 a construction is shown in which the stretching-bolts I may be made separately from the other parts, if desired.

What I claim is—

In a bolting-reel, the combination, with an adjustable head and a band for confining the cloth, of tenter-hooks, or points for holding the cloth under tension while the band which permanently confines it is being moved or adjusted, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. FINCH.

Witnesses:

C. F. KNAPP,
M. HARMON.