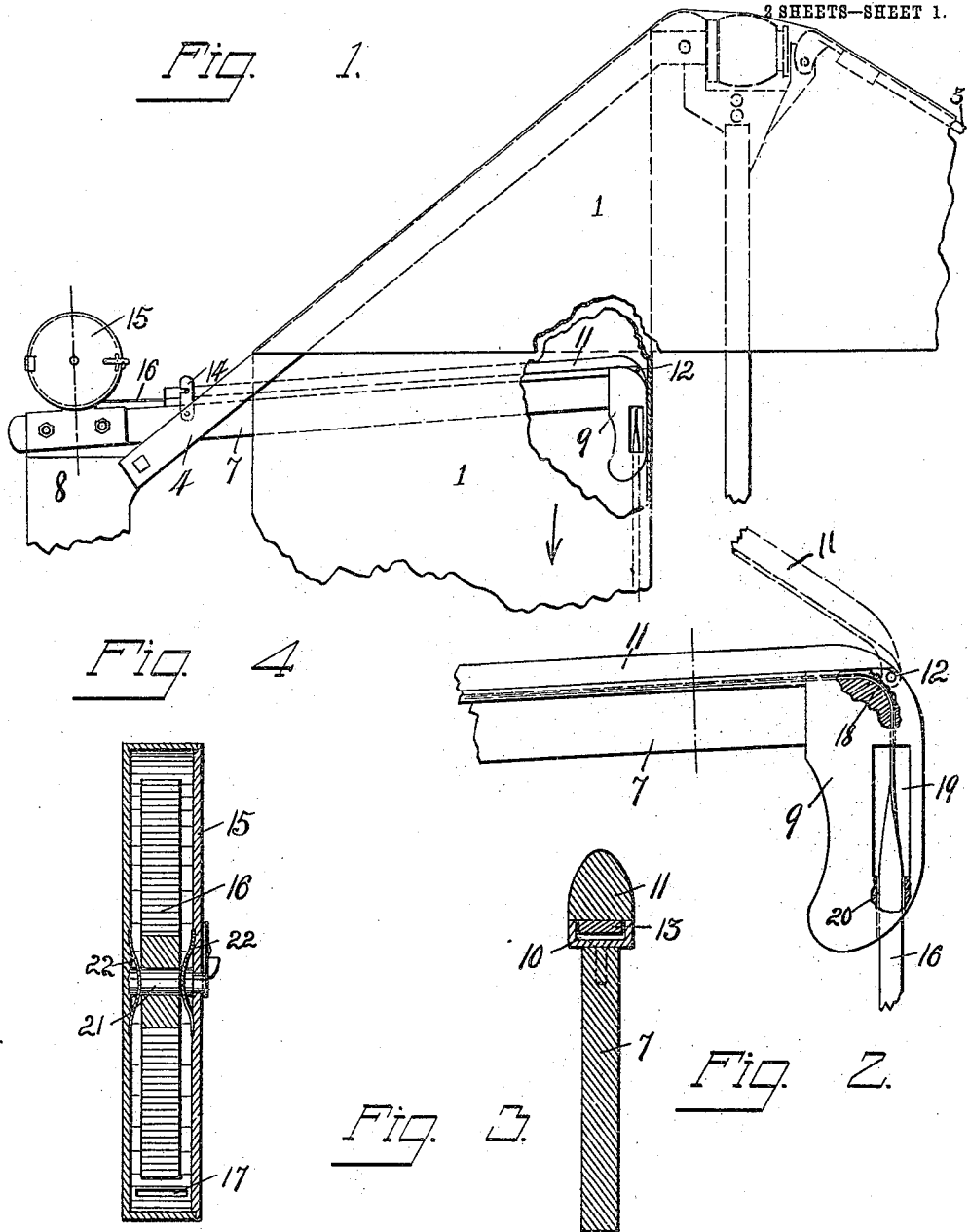


A. J. BOHNENGEL.
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APPLICATION FILED NOV. 8, 1909.

962,193.

Patented June 21, 1910.

2 SHEETS—SHEET 1.



WITNESSES:

G. H. Bills.
C. E. Thomas

INVENTOR.

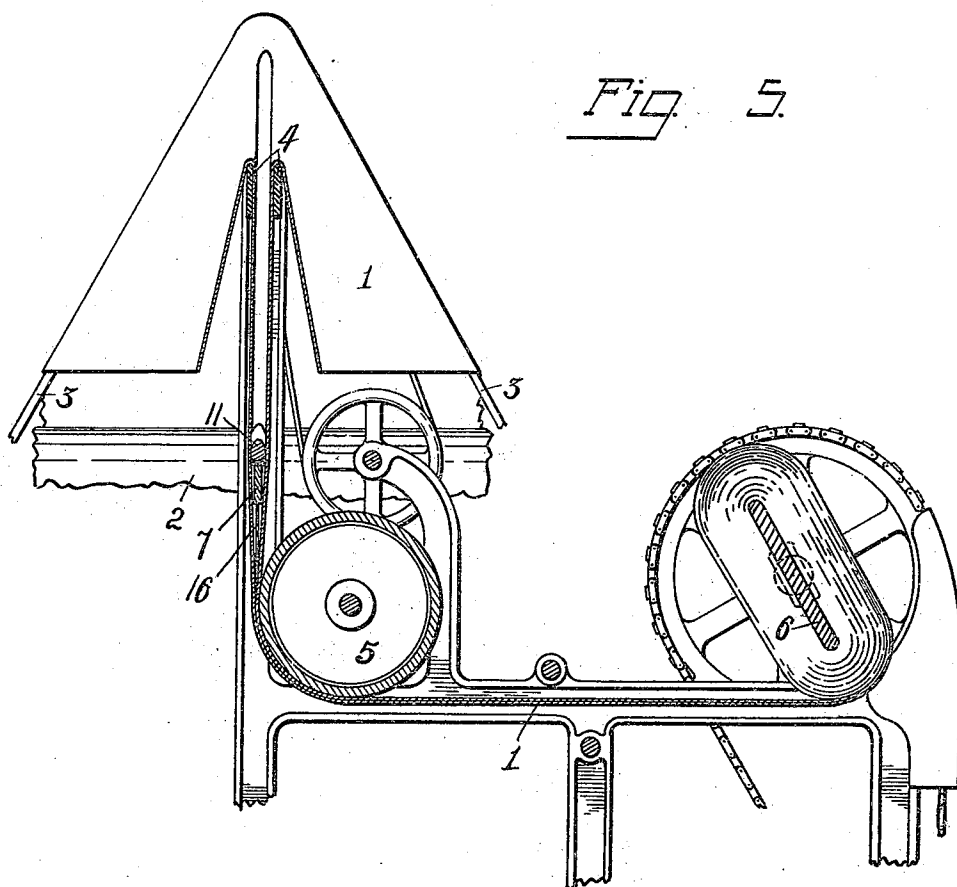
Andrew Bohnengel,
By Owen & Owen,
His attys.

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UNITED STATES PATENT OFFICE.

ANDREW JOSEF BOHNENGEL, OF TOLEDO, OHIO.

ATTACHMENT FOR CLOTH DOUBLING AND FOLDING MACHINES.

962,193.

Specification of Letters Patent. Patented June 21, 1910.

Application filed November 8, 1909. Serial No. 526,764.

To all whom it may concern:

Be it known that I, ANDREW JOSEF BOHNENGEL, a citizen of Germany, and a resident of Toledo, in the county of Lucas and State of Ohio, have invented a certain new and useful Attachment for Cloth Doubling and Folding Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to cloth rolling machines, and has reference more particularly to machines of this type adapted for folding and rolling double width cloth, but is not necessarily restricted to use in such connection.

The object of my invention is the provision of a simple and efficient attachment for machines of this type which is adapted to feed a tape of suitable material having proper designations thereon between the folds of the goods adjacent the fold line thereof as it is being folded and rolled, whereby to designate the length of each roll and also the length of any remaining fractional portion thereof, thus enabling a merchant to easily determine at any time the length of goods remaining in a roll after a lot or different lots have been cut therefrom.

The operation, construction and arrangement of the parts of the invention are fully described in the following specification, and a preferred embodiment of the same is illustrated in the accompanying drawings, in which,—

Figure 1 is an elevation of a portion of a cloth doubling and rolling machine with my attachment associated therewith and with the cloth which is being acted on partly broken away. Fig. 2 is an enlarged side elevation of the inner end portion of the arm comprising my invention. Fig. 3 is a cross-section of the same. Fig. 4 is an enlarged cross-section of the tape case with a ball of tape in section therein, and Fig. 5 is a vertical section of a portion of a doubling and rolling machine in operation with the invention associated therewith.

Referring to the drawings, 1 designates the cloth which unwinds from a roll 2,

passes up the converging guide-bars 3, 3 of the doubling and rolling machine, thence is doubled upon itself down between the spaced parallel fold-bars 4, 4, which are inclined as indicated, thence passes under the drum 5, and finally winds on a bolt-board 6.

My invention consists in utilizing and adapting the usual guide-arm 7 for the goods to guide a tape from an external point to between the folds of the cloth adjacent to the fold line thereof, as indicated in Fig. 1. This arm projects from a convenient part of the machine frame, as 8, and projects in substantially a horizontal plane between the fold-bars 4 4 and the folds of the goods. The free end of the arm is preferably angled downwardly as shown at 9, and in contact with the fold of the goods to constantly maintain such fold-line in the same plane to cause a true rolling of the goods.

The arm 7 has its top edge or surface longitudinally channeled, as shown at 10, Fig. 3, and capping such channel is a strip 11, which is hinged to the free end of such arm, as at 12. The strip is preferably provided on its under surface with a shoe 13 adapted to fit into the upper portion of the channel 10 to prevent lateral movements of such strip when seated. A catch 14 coacts with a pin on the free end of the strip 11 to lock it in closed position.

Mounted on the outer end of the arm 7 or in contiguous position thereto is a case 15 in which is mounted a roll of tape 16 having the desired measurements thereon, the outer end of this tape passes out through a slot 17 in the lower peripheral portion of the case, and thence enters and passes through the closed channel 10. At the inner end of this channel it passes through a downwardly curved passage or channel 18 and into an opening 19 in such end, where it receives a quarter turn to cause it to lie flat with the cloth, thence passes from the angled end of the arm through a registering channel 20 therein, and feeds out between the folds of the goods adjacent to the fold line thereof, as shown. One side of the case 15 is adapted to open to permit of the insertion or removal of a roll of tape. This tape roll is mounted on a stub-shaft 21 secured within the case, and is prevented from free turning movements thereon by bowed springs 22, which have their outer thrusts against the sides of the case and their inner thrusts

against the central or hub portion of the roll to frictionally resist a too free turning thereof.

The operation of my device is as follows:—When starting to double and roll a piece of cloth, the end of the measuring tape 16 is threaded through the channels 10, 18 and 20 of the guide-arm 7 and passed between the folds of the goods to permit it to wind on the bolt-board with the goods. As the goods pass under the drum 5 it is caused to grip the interposed tape to draw it from its roll and through the arm 7. The tape is of a length to suit the length of the goods to be rolled, and a new roll 16 is placed in the case 15 for each bolt of goods.

I wish it understood that my invention is not limited to any specific construction or arrangement of the parts except in so far as such limitations are specified in the claims.

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

1. In a machine of the class described, an arm adapted to project between the folds of the goods being doubled and having its top edge channeled and its free end projected to adjacent the fold line of the goods and provided with a tape passage which extends lengthwise of the goods and communicates with said channel, a removable cap strip for said channel, and tape carrying means asso-

ciated with the outer end of the arm, substantially as described.

2. In a machine of the class described, an arm adapted to project between the folds of the goods being doubled and having a channel in its top and a passage in its free end which registers with said channel and is adapted to guide a tape to feed lengthwise between the folds of the goods adjacent to the fold line thereof, a strip hinged to said arm and adapted to close the open side of said channel, and a tape-case disposed adjacent the outer end of said arm in position to feed a tape strip to said channel, substantially as described.

3. A device of the class described, comprising an arm adapted to project between the folds of goods being rolled, said arm having a tape feeding channel therein and its inner or free end angled and the channel continuing therethrough, removable means coöperating with the arm to form such channel, and means at the outer end of the arm for carrying a tape for feeding through the channel.

In testimony whereof, I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

ANDREW JOSEF BOHNENGEL.

Witnesses:

C. W. OWEN,
C. H. BILLS.