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3,055,490

TURRET WHEEL FOR WRAPPING MACHINES

Filed Dec. 5, 1958

3 Sheets-Sheet 1

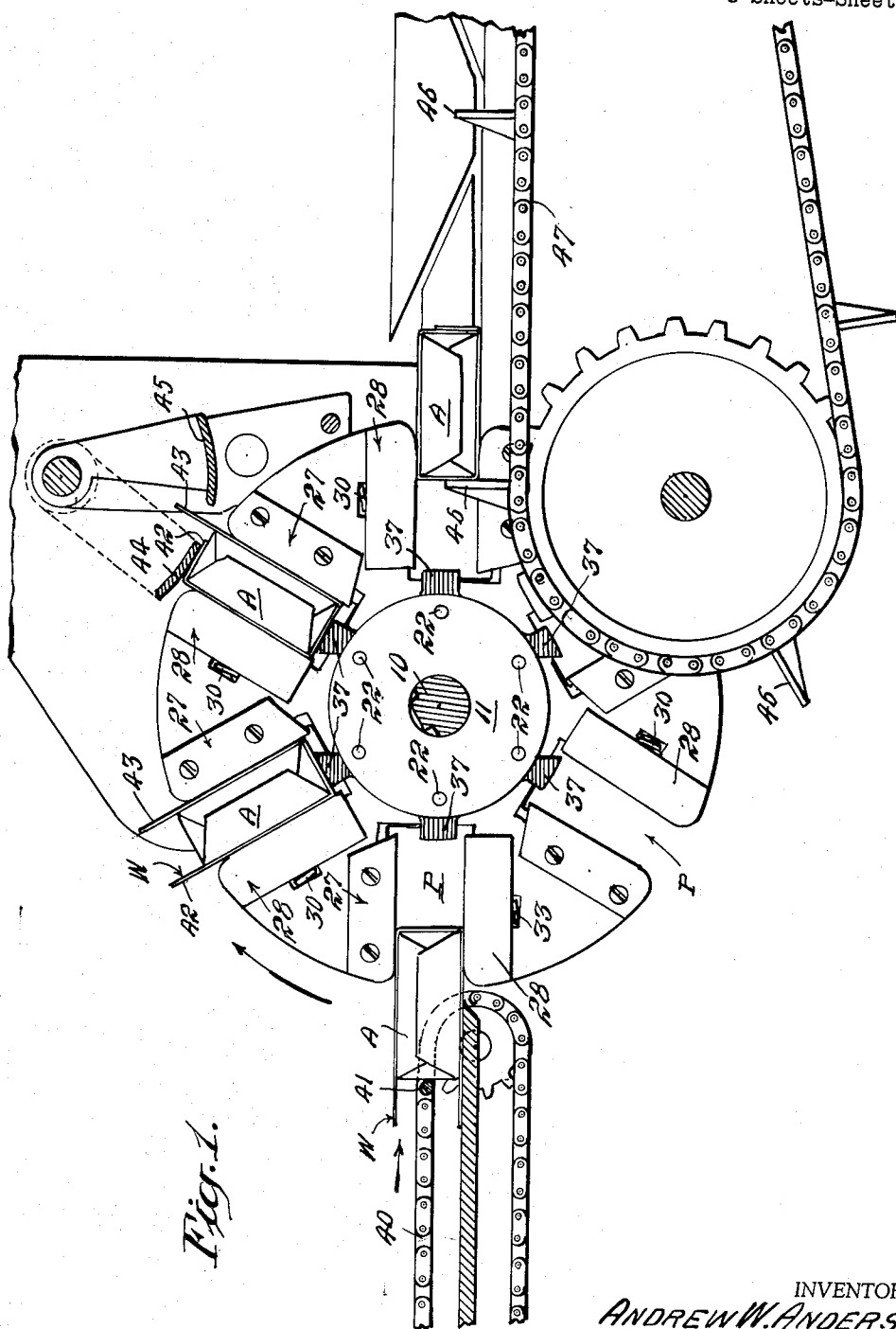


Fig. 1.

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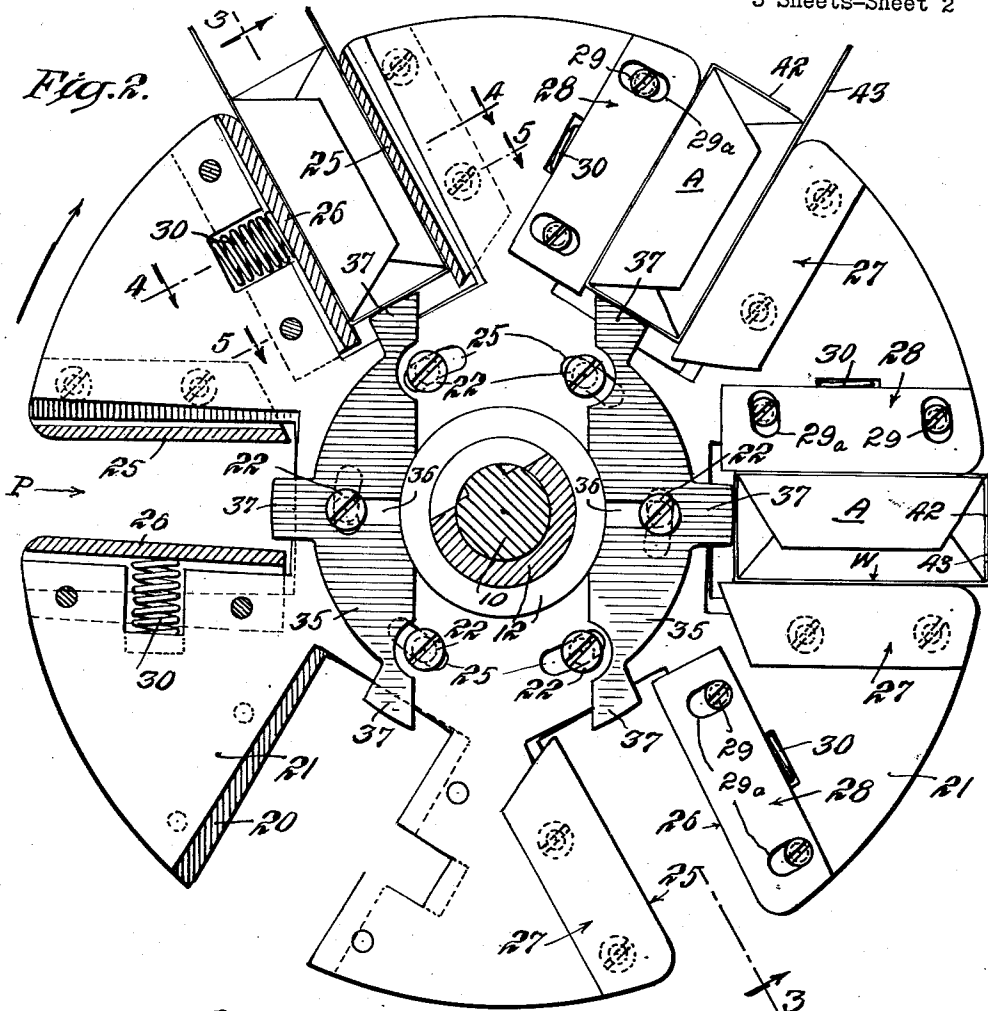
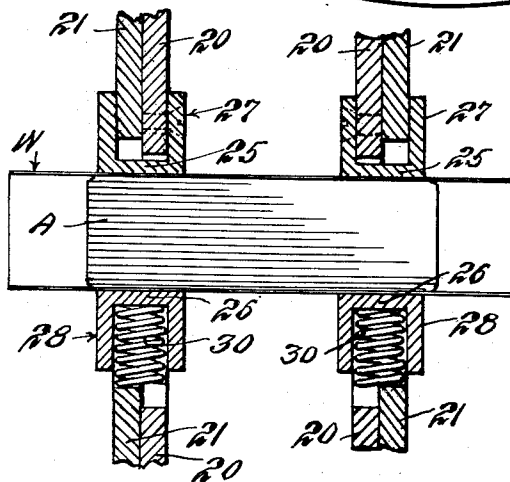


Fig. 4.

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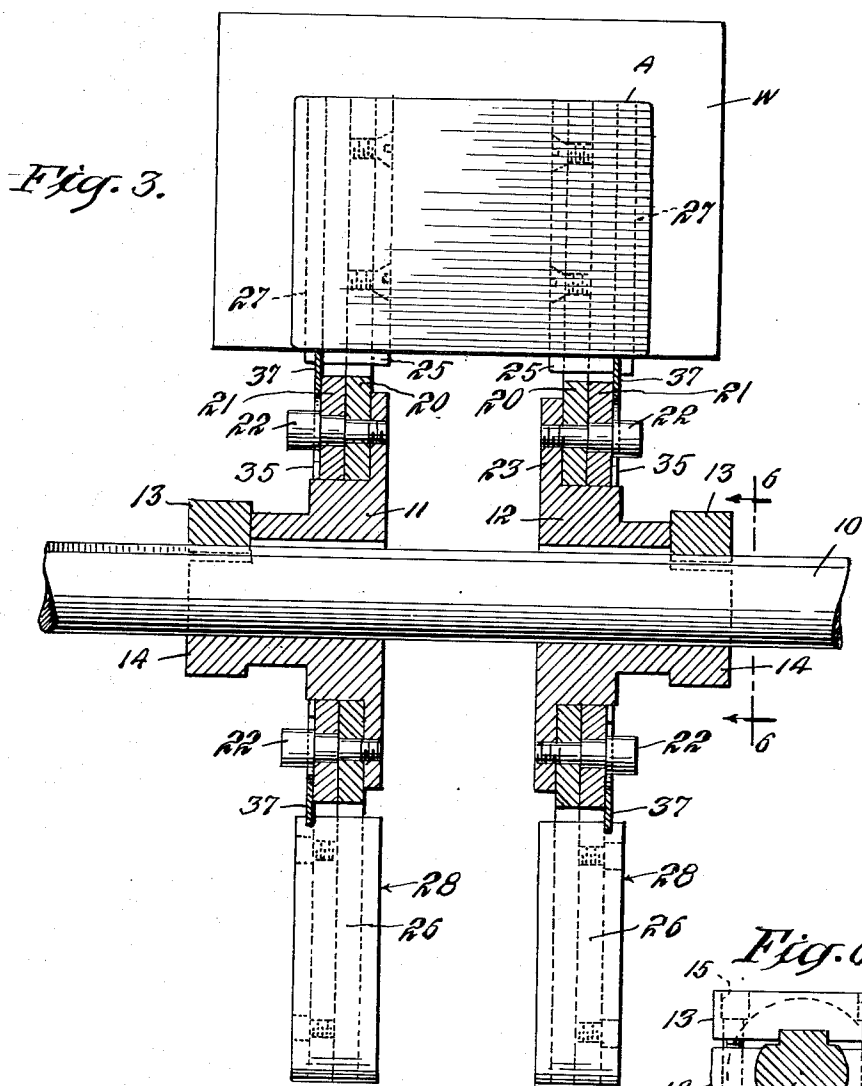
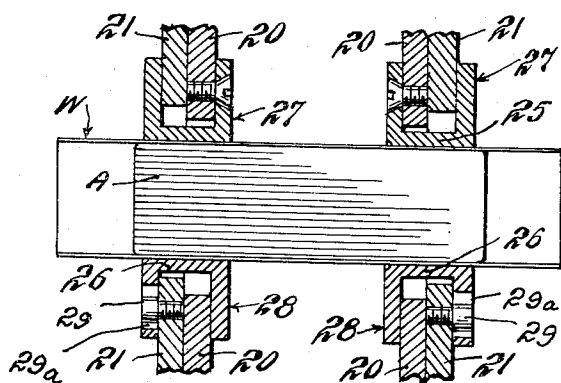
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TURRET WHEEL FOR WRAPPING MACHINES

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3 Sheets-Sheet 3



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TURRET WHEEL FOR WRAPPING MACHINES**Andrew W. Anderson, West Caldwell, N.J., assignor to Scandia Packaging Machinery Company, North Arlington, N.J., a corporation of New Jersey****Filed Dec. 5, 1958, Ser. No. 778,454****2 Claims. (Cl. 198—211)**

This invention relates to wrapping machines and particularly to turret wheels used in wrapping machines and having radial pockets for receiving articles and wrappers.

The invention has for its salient object to provide a turret wheel of the character described, so constructed that the pockets can be simultaneously adjusted as to width by a single operation.

Another object of the invention is to provide a turret wheel of the character described with pockets for receiving articles and wrappers and having adjustable means for varying the depths of the pockets.

Further objects of the invention will appear from the following description taken in connection with the drawings which form a part of this application, and in which:

FIG. 1 is an elevational view, partly in section, showing a turret wheel embodying the invention, and means for feeding articles and wrappers into the pockets, and means for ejecting articles and wrappers from the pockets;

FIG. 2 is an elevational view, partly in section, showing the details of construction of the turret wheel and pockets;

FIG. 3 is a sectional view taken substantially on line 3—3 of FIG. 2, looking in the direction of the arrows;

FIG. 4 is a transverse section through one of the pockets taken substantially on line 4—4 of FIG. 2, looking in the direction of the arrows;

FIG. 5 is a transverse section through one of the pockets taken substantially on line 5—5 of FIG. 2, looking in the direction of the arrows; and

FIG. 6 is a sectional elevation taken substantially on line 6—6 of FIG. 3, looking in the direction of the arrows.

In the particular embodiment of the invention illustrated in the drawings, the turret wheel is mounted on a shaft 10 which is rotatable in the direction of the arrow shown in FIG. 1, and the shaft 10 has splined thereon a pair of hubs 11 and 12. The outer ends of these hubs are split, as shown in FIG. 6 at 13 and 14, the split ends being held together by bolts 15. When the bolts 15 are loosened, the hubs can be moved toward or away from each other to adjust the pockets or pocket forming members in such a manner as to accommodate different lengths of articles. After the adjustments, the bolts 15 are tightened to secure the hubs in position on the shaft 10.

Each hub has mounted thereon a pair of disks 20 and 21 which are secured by bolts 22 to flanges 23 extending outwardly from the hubs. The bolts 22 extend through openings in one disk and through slots 25 in the other disk, as shown in FIG. 2.

The turret wheel as shown in FIGS. 1 and 2 has a plurality of radial pockets P, each pocket being formed by sides 25 and 26. These sides of the pockets are formed by the inwardly facing ends of channel members 27 and 28. As shown in the sections in FIGS. 4 and 5, the channel members 27 and 28 are secured respectively to the disks 20 and 21. The channel members 28 have a pin and slot connection 29, 29a to disk 21. Thus it will be seen that one of the side faces of each pocket, as, for instance, the face 25 is secured to the disk 20, and the other pocket face 26 and channel member of which it forms a part is secured to the disk 21.

As shown in FIG. 4, the channel members 28 are normally pushed inwardly by springs 30 which bear at one end against the disks 21, the other ends of the springs seat-

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ing against the inner ends of the channel members or against the side faces 26.

In order to vary the width of the pockets, the bolts 22 which hold the disks to the flanges are loosened and the disks are axially adjusted on the hubs relative to each other so as to move the pocket sides or side faces toward and away from each other, thus varying the widths of the pockets. The single operation of axially adjusting the disks simultaneously adjusts all of the pocket sides or side faces and the widths of the pockets will be changed, the change in the case of each pocket being identical with that of the other pockets.

Means is also provided for varying the depths of the pockets, this being accomplished by a pair of plates 35 which are mounted on the disks in the manner shown in FIG. 3 on the bolts 22. It will be noted that the plates 35 are slotted, as shown at 36, and can have a limited adjustment toward or away from the axis of the shaft 10 to properly position the plates. Each plate 35 has projections 37 which extend radially of the axis and determine the depths of the pockets. To obtain different depths the plates are removed and other plates with different lengths of projections are substituted.

The details of operation of the turret wheel and folding mechanism are not illustrated and need not be explained since these form no part of the present invention and attention is directed to Patent No. 2,400,682, W. B. Bronander, issued May 21, 1946.

Referring to FIG. 1, it will be noted that the articles A are fed into the turret wheel by conveyors 40 and by rods 41 carried by the conveyors. As the article is fed into a pocket it will push a wrapper W into the pocket, the wrapper having been fed into the path of movement of the article. During the rotation of the turret wheel the outwardly projecting ends 42 and 43 of the wrapper project outwardly from the pocket and are folded by arcuate folding members 44 and 45 in the manner described in the aforementioned patent. After the article and wrapper have been carried by the turret wheel through 180°, they are engaged and ejected from the pockets by pushers or lugs 46 carried by chains 47.

From the foregoing specification it will be clear that simple and practical mechanism has been provided whereby, in a single operation, the side plates or side walls of a plurality of radial pockets in a turret wheel can be simultaneously adjusted toward and away from each other to vary the widths of the pockets and, furthermore, means has been provided for changing the depths of the pockets.

Although one specific embodiment of the invention has been particularly shown and described, it will be understood that the invention is capable of modification and that changes in the construction and in the arrangement of the various cooperating parts may be made without departing from the spirit or scope of the invention, as expressed in the following claims.

What I claim is:

1. A turret wheel for wrapping machines having a plurality of radial pockets arranged to receive and transport articles and wrappers through wrapping mechanism, each pocket having spaced parallel side walls normally fixed relative to each other during the operation of the turret wheel, and means for simultaneously and in one operation adjusting one side wall of each pocket toward or away from the other side wall of said pocket to an alternate fixed relation, the said other side wall being resiliently pressed toward the first mentioned side wall.

2. A turret wheel for wrapping machines comprising a pair of relatively movable members and having a plurality of radial pockets arranged to receive and transport articles and wrappers through wrapping mechanism, each pocket

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having spaced side walls normally fixed relative to each other during the operation of the turret wheel, one side wall of each pocket being connected to one of said members and the other side wall being connected to the other member, the side walls of each pocket being adjustable toward and away from each other when one of said adjustable members is moved circumferentially with reference to the other, one of the parallel side walls being resiliently mounted.

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277,133
1,256,292
1,805,693
2,137,656
2,633,279

4**References Cited in the file of this patent****UNITED STATES PATENTS**

Hill	-----	May 8, 1883
Brush	-----	Feb. 12, 1918
Gladeck	-----	May 19, 1931
Rose	-----	Nov. 22, 1938
Malhiot	-----	Mar. 31, 1953