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BAND FOR TYING VEGETABLES INTO BUNDLES

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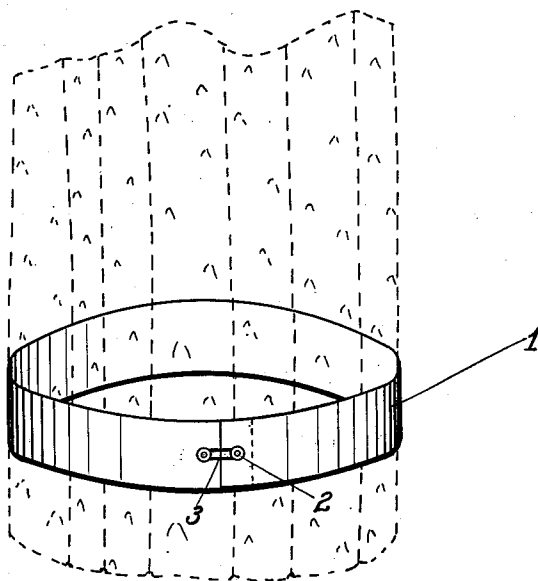


Fig. 1.



Fig. 2.

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UNITED STATES PATENT OFFICE.

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BAND FOR TYING VEGETABLES INTO BUNDLES.

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My invention relates to bands for tying articles together into bundles, and particularly to tying vegetables having long stalks, such as celery, asparagus, etc., into bundles for shipment to market and for keeping the bundles neat and snug during shipment and the subsequent handling prior to consumption.

Heretofore it has been customary to tie these bunches of vegetables together with lengths of cotton ribbon or tape at one or more points intermediate the length of the stalks, and if so desired the name of the shipper or some one else is imprinted upon the bands. These bands are, of course, tied on while the vegetables are in a comparatively fresh state, the vegetables containing a fairly large amount of moisture. These vegetables are tender when tied, and therefore when the bands are tightened they will cut into the outer row of the stalks of the bundle and thereby injure them.

The time that elapses between the actual tying and the delivery of the bundle to the ultimate consumer is highly variable, but may be safely placed at several days. During this interval the moisture in the vegetables continuously evaporates, thereby decreasing the diameter of the bunch, so that the band will no longer snugly hold the stalks together, as the band will be too long. This wilting of the vegetables destroys the snugness of fit of the band, causing the bunch to appear lop-sided and uneven, and even permitting one or more of the stalks to fall out of the bunch, whereupon the band becomes useless and may fall off entirely.

If it should so happen that the bundle should expand after the initial tying, as for instance, by watering or the like, the band will again not be of the correct size, becoming too short, and will cut into the outer row of stalks of the bundle, thereby damaging them. For these reasons cloth bands have been found somewhat unsatisfactory for use for this purpose.

Another objection to the use of cloth tapes is that it is expensive to print upon them, as compared to smooth-surfaced paper, mainly because of the greater amount of ink required to print upon cloth as compared to the paper.

Among the objects of my invention is the production of a band for tying vegetables into bundles, which will be sanitary, durable, economical, and which will be auto-

matically compensating for changes in diameter of the bundle so as not to injure the stalks of the bundle, but will maintain them together neatly, attractively and compactly under all conditions.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art to which this invention appertains, from the disclosures herein given.

To this end, my invention consists in the novel construction, arrangement and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference indicate like or corresponding parts throughout the views,

Figure I is a perspective view of one form of my invention in place upon a bundle of vegetables indicated in dotted lines; and

Figure II is a plan view of the tying band, laid out flat.

The invention comprises generally speaking, the use of a waterproof strip or band, both of the ends of the strip provided with a fastening means thereat, adapted to cooperate with an elastic member, so that when the strip is wrapped around a bunch of vegetables with the ends of the strip overlapped, the elastic member may be attached to both of said fastening means to draw the ends of the strip together, thereby making a snug bundle and permitting of expansion or contraction of the bundle without impairing the snugness of the tying or injuring the vegetables.

The band or strip is indicated at 1 and is of a material of the desired width and thickness, impervious to moisture, preferably of parchment paper or the like, the length of said strip being dependent upon the diameter of the bundles to be made up. Adjacent of the ends of the strip, one at each end upon the same side or surface of the strip is a fastening means 2, for a purpose to be hereinafter described. These fastening means may be formed in a variety of ways, one of the ways being in the manner shown, wherein substantially tough paper washers or the like are secured to the strip by means of the eyelets or grommets there shown.

It will be seen that the strips are flexible and are preferably of greater length than the perimeter of the bunch for which they

are intended, so that when wrapped around the bunch, the ends of the strip will overlap, and the fastening means will lie on the outermost surface of the strip. In this position an elastic member 3 is fastened to both the fastening members 2, this elastic member being preferably the ordinary "rubber band", the same being looped over both the members 2 in the manner shown:

It is obvious that the rubber band must be of such length that it will keep the strip 1 snugly around the bunch of vegetables, said band tending to draw the ends of the strip together, or in other words it acts to yieldingly contract the strip about the bundle. One or more strips may be used for tying each bundle, as desired. Further, the band will not be so tight as to cut into the stalks, yet will hold them together snugly, neatly and efficiently, permitting of the expansion or contraction of the bunch due to changes in the moisture content of the stalks.

The cost of using these paper strips and rubber bands is a great deal less than for cloth bands, and the cost of printing any advertising matter upon the strips of my invention is much less than for printing upon the tape. As a matter of fact, the difference in cost between printing upon cloth and paper, will of itself, be sufficient to pay for the paper bands.

In addition to the foregoing advantages arising from the use of the devices of my invention, another advantage is that the time consumed in applying my devices is very much less than that of tying with tape, because no knots have to be made, nor do the ends of the band have to be cut off.

Having thus described my invention, it

is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence I do not wish to be understood as limiting myself to the exact form, construction, arrangement and combination of parts herein shown and described, except as limited by the claims.

What I claim as new and desire to secure by Letters Patent is:

1. A band for tying moisture-exuding vegetables into bunches, and comprising a strip of pliant, flexible waterproof material adapted to encircle said bunch of vegetables, and means for yieldably holding said strip in place about said bunch and permitting expansion and contraction of the latter.

2. In a device for tying together bundles of fresh produce, the combination with a strip of impervious material, of an elastic connecting member adapted to be arranged between the ends of said strip, whereby expansion and contraction of said bundle will be automatically compensated for, and the band will fit the bundle snugly throughout its circumference at all times.

3. In a device of the kind described and in combination, a flat strip of pliant waterproof paper adapted to be wrapped about a bundle of fresh vegetables and provided with fastening means at the ends, and an elastic band adapted to be engaged with said fastening means to normally draw said ends together, while permitting expansion and contraction of said bundle resulting from changes in the moisture content of said vegetables of the bundle.

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