June 4, 1957 J. B. HOLLIDAY 2,794,537

CLIP FOR TOBACCO HARVESTER

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Fig. 1

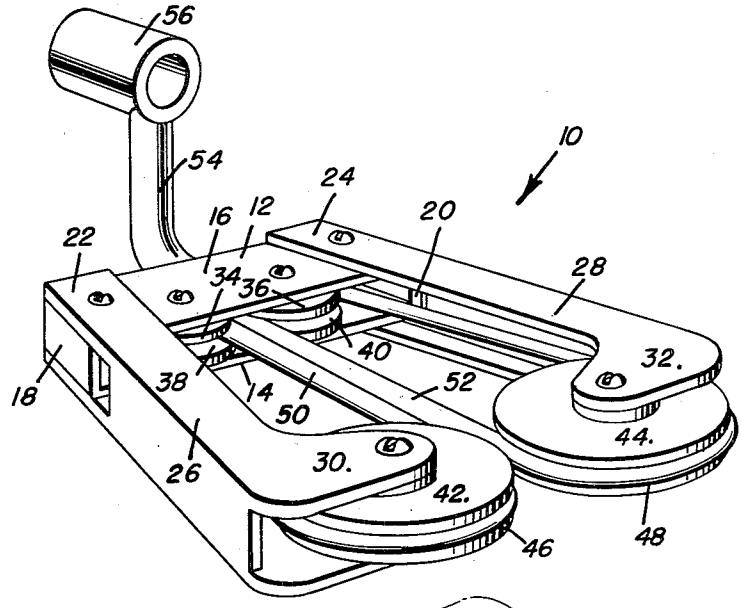
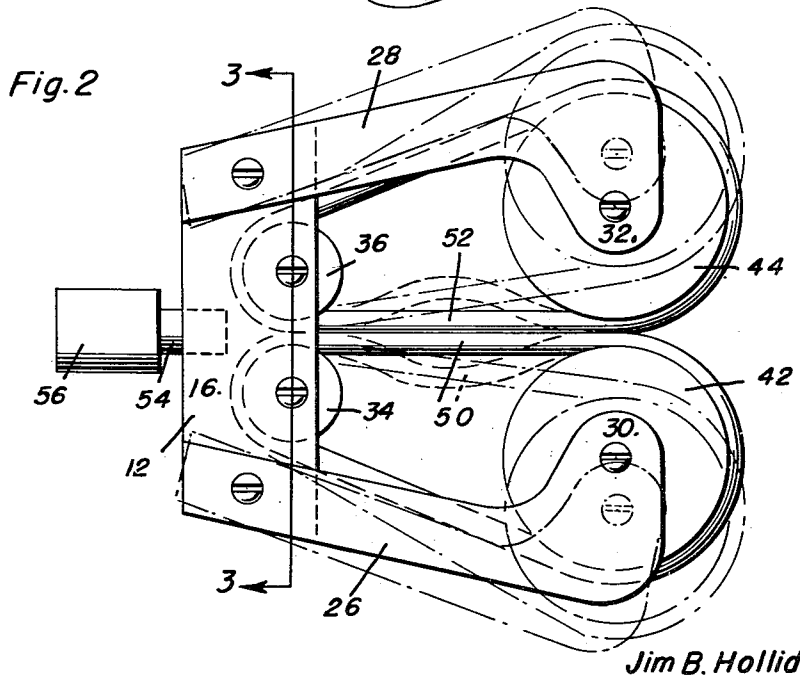


Fig. 2



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Fig. 4

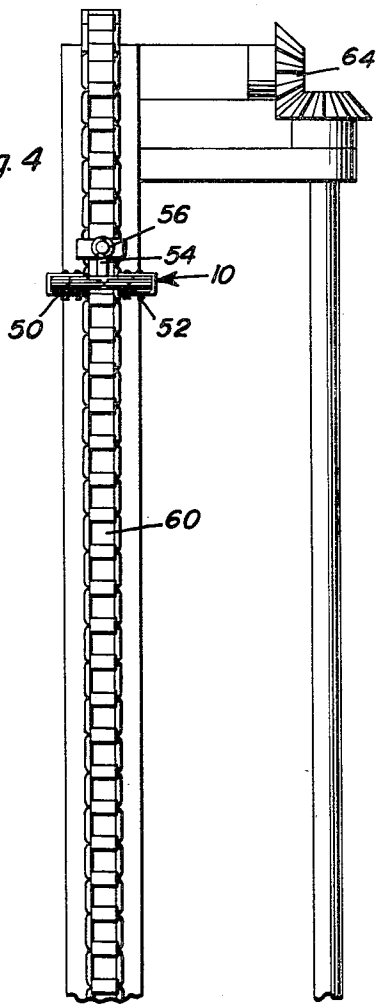


Fig. 5

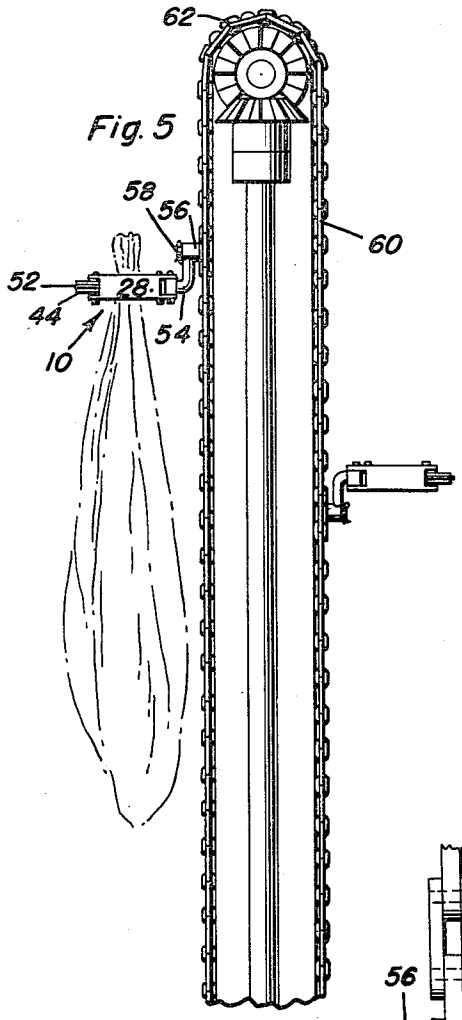


Fig. 6

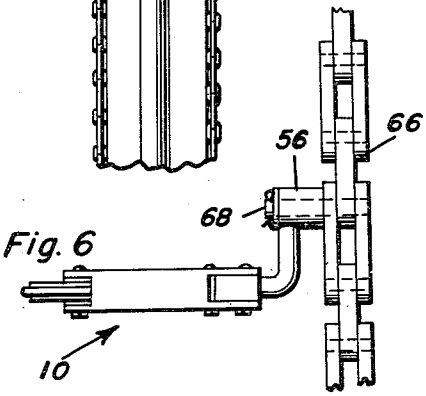
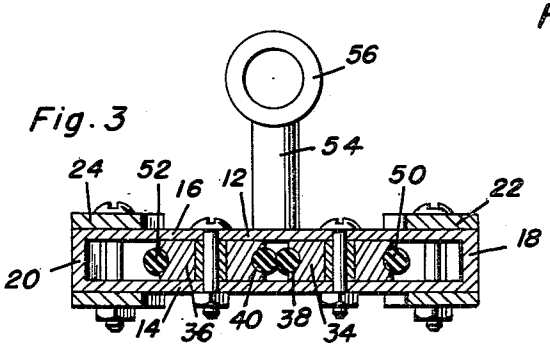


Fig. 3



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2,794,537

CLIP FOR TOBACCO HARVESTER

Jim B. Holliday, Jamesville, N. C.

Application May 7, 1954, Serial No. 428,187

4 Claims. (Cl. 198—179)

This invention relates to a clip for holding tobacco leaves in a secure manner so that the leaves may be carried by the clips which are attached to conveyor chains operatively mounted on tobacco harvesters.

The primary object of the present invention resides in the provision of means for resiliently engaging and holding tobacco leaves in a secure manner without bruising, crushing, or otherwise adversely affecting the tobacco leaves.

The construction of this invention features resilient endless belts which are so mounted as to mutually embrace tobacco leaves which are positioned therein. The endless belt is entrained about rollers mounted in a base and wheels mounted on arms pivotally attached to the base. The wheels are outwardly offset from the rollers and are larger than the rollers so that the resilient endless belts will tend to draw the rollers and hence the inner flights of the belts together. It is to be noted that the base is formed of a pair of spaced guide plates and the arms have bifurcated end portions to which the wheels are attached, thereby providing guide means for the endless belts.

Still further objects and features of this invention reside in the provision of clips for tobacco harvesters that are strong and durable, simple in construction and manufacture, which utilize the spring-like qualities of resilient belts to securely hold tobacco leaves in position, while being comparatively inexpensive to produce and unlikely to be affected by juices and saps exuded by the tobacco leaves.

These, together with the various ancillary objects and features of the invention which will become apparent as the following description proceeds, are attained by these clips, a preferred embodiment being shown in the accompanying drawings, by way of example only, wherein:

Figure 1 is a perspective view of the clip comprising the present invention;

Figure 2 is a plan view of the clip showing in dotted lines the position of the clip when tobacco leaves are positioned therein;

Figure 3 is a vertical sectional view as taken along the plane of line 3—3 in Figure 2;

Figure 4 is a side elevational view illustrating the manner in which the clip is mounted on one form of conveyor chains;

Figure 5 is a side elevational view illustrating the manner in which the tobacco is carried by the clips; and

Figure 6 is another elevational view similar to that of Figure 5, illustrating the device as utilized on a different form of chain.

With continuing reference to the accompanying drawings wherein like reference numerals designate similar parts throughout the various views, reference numeral **10** generally designates the clip comprising the present invention. The clip **10** includes a base **12** including a pair of spaced guide plates **14** and **16** which are interconnected

by end portions **18** and **20**. Suitably attached to the ends of the base **12** are the bifurcated ends **22** and **24** of arms **26** and **28** which terminate in bifurcated free portions **30** and **32**. It is noted that the central portions of the arms **26** and **28** are of substantial U-shape in cross-section.

Rotatably secured between the guide plates **14** and **16** and inwardly of the arms **26** and **28** are a pair of rollers **34** and **36** provided with peripheral grooves **38** and **40**. The rollers **34** and **36** are much smaller in size than the wheels **42** and **44** which are pivotally mounted by any convenient means in the bifurcated free end portions **30** and **32** of the arms **26** and **28**. It is to be noted that the wheels **42** and **44**, because of their greater size, are outwardly offset from the rollers **34** and **36** and are also outwardly offset because the arms **26** and **28** extend divergently from the base **12**. The wheels **42** and **44** are provided with grooves **46** and **48** in their periphery and endless belts **50** and **52** are each entrained about one of the wheels **42** and **44** and rollers **34** and **36** and are received respectively in the grooves **38** and **40** and **46** and **48**.

Attached to the base **12** in any convenient manner is a bracket **54** which terminates in a hollow cylindrical member **56**. A pin **58** extending through the cylindrical portion **56** of the bracket **54** may be utilized to attach the clip **10** to a conveyor chain **60** which is entrained about sprockets **62** which are driven through the bevel drive gear arrangement **64** as disclosed in the application for patent, Serial No. 385,051 for Tobacco Harvester, now Patent No. 2,672,248. Further, as is shown in Figure 6, the clips **10** may be secured to other types of chains **66** normal to the direction in which they are secured to the chains **60**, as may be desired, utilizing enlarged pins **68** which pass through the cylindrical portion **56** of the bracket **54** while attaching adjacent links together.

It is to be noted that the guide plates **14** and **16** aid in holding the resilient endless belts **50** and **52** in position while the bifurcated end portions **30** and **32** do likewise. Further, because of the tendency of the resilient endless belts **50** and **52** to cause, by spring-like action, the abutment of the inner flights of the endless belts and the urging of the wheels **42** and **44** towards each other, the inner flights of the endless belts **50** and **52** will securely grasp in a resilient manner the tobacco leaves which are placed therebetween. Further, because of the construction of this invention, it can be recognized that there is a minimum of binding of parts thereby permitting this clip to be easily maintained even though subjected to the deleterious action of the saps and juices from tobacco leaves and the tendency of these juices and saps to gum structures.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claims.

What is claimed as new is as follows:

1. A clip for holding tobacco leaves for use in combination with conveyor chains of tobacco harvesters comprising a base, a pair of arms pivotally attached to the ends of said base, a pair of rollers rotatably secured to said base inwardly of said arms, a pair of wheels rotatably carried by said arms and outwardly offset from said rollers, and a pair of resilient endless belts each entrained over one of said rollers and one of said wheels.

2. A clip for holding tobacco leaves for use in combination with conveyor chains of tobacco harvesters comprising a base, a pair of arms pivotally attached to the ends of said base, said arms extending divergingly from said base, a pair of rollers rotatably secured to said base inwardly of said arms, a pair of wheels rotatably carried by said arms, and a pair of resilient endless belts, each of said belts being entrained over one of said rollers and one of said wheels, said wheels being comparatively larger than said rollers.

3. A clip for holding tobacco leaves for use in combination with conveyor chains of tobacco harvesters comprising a base, said base including a pair of spaced guide plates, a pair of arms pivotally secured to the ends of said plates, said arms having bifurcated free portions, a pair of rollers rotatably mounted in said base between said guide plates, a pair of wheels rotatably mounted in said bifurcated free portions, said wheels being outwardly offset from said rollers and larger than said rollers, and a pair of resilient endless belts, each of said belts being entrained over one of said rollers and one of said wheels.

4. A clip for holding tobacco leaves for use in combination with conveyor chains of tobacco harvesters comprising a base, said base including a pair of spaced guide plates, a pair of arms pivotally secured to the ends of said plates, said arms having bifurcated free portions, a pair of rollers rotatably mounted in said base between said guide plates, a pair of wheels rotatably mounted in said bifurcated free portions, said wheels being outwardly offset from said rollers and larger than said rollers, and a pair of resilient endless belts, each of said belts being entrained over one of said rollers and one of said wheels, and brackets attached to said base securing said clip to said conveyor chains.

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