L. S. BLOOD.

SAP GATHERING MEANS.

APPLICATION FILED NOV. 13, 1920.

1,366,054. Patented Jan. 18, 1921.

Fig. 1.

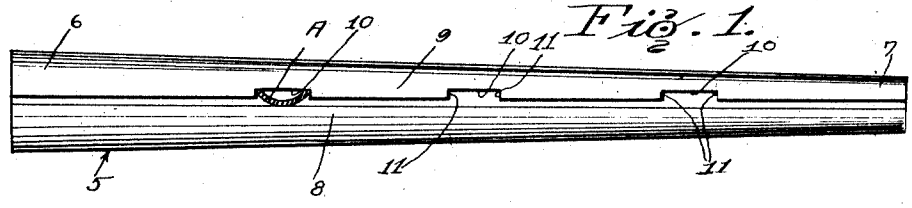


Fig. 2.

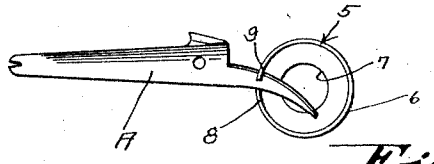


Fig. 3.

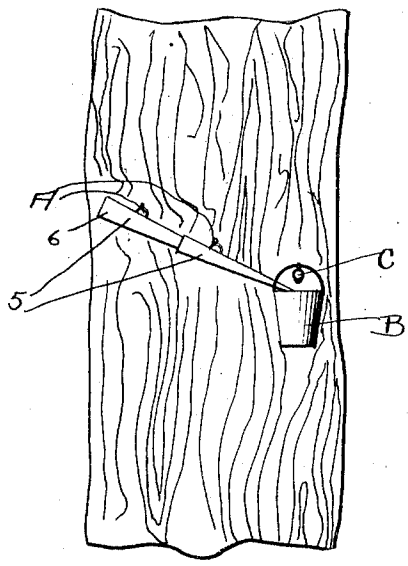
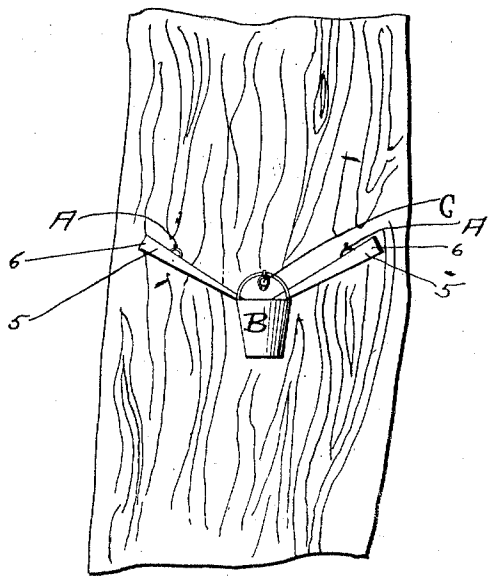


Fig. 4.



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SAP-GATHERING MEANS.

1,366,054. Specification of Letters Patent. Patented Jan. 18, 1921.

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To all whom it may concern:

Be it known that I, LEON S. BLOOD, a citizen of the United States, residing at Hartland, in the county of Windsor and State of Vermont, have invented certain new and useful Improvements in Sap-Gathering Means, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to sap gathering means, and has for its object to provide novel means of this character wherein a quantity of sap from several different sources may be discharged into a single receptacle.

Another object is to provide means of this character wherein one or more sap discharging spouts may be used in connection with one sap conveyer or conduit, and wherein one or more conveyers may be used in connection with each other to convey all of the sap discharged by the spouts into a single receptacle.

Another object of the invention is to provide means of this character including a novel conveyer which is open on one side for the reception of the ends of the spouts, the sap being protected in its passage through the conveyer.

A still further object of the invention is to provide a sap conveyer of this character consisting of a sheet of material arranged in conical form, and wherein the longitudinal edges of the sheet are adapted to engage the ends of any conventional form of spout.

With the above and other objects in view, the invention consists in the improved construction and arrangement of parts to be hereinafter more particularly described, fully claimed and illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of a sap conveyer constructed in accordance with an embodiment of the invention, the spout being shown in section,

Fig. 2 is an end elevation of the conveyer showing the spout applied,

Fig. 3 is a view in elevation showing one manner of using the conveyer, and

Fig. 4 is an elevation showing another manner of using the conveyer.

Referring to the drawings, A designates a conventional form of spout, such as used in the gathering of sap, one end of said spout being arranged for insertion in the trunk of a tree, while the other end is intended to discharge the sap into a receptacle. With this form of spout, it is of course necessary to use a receptacle with each spout so that the process of filling the receptacle is slow in view of the limited source of supply through the use of one spout and furthermore a quantity of buckets must be kept on hand.

In order to eliminate this disadvantage and to facilitate the gathering of sap, there is provided a novel form of conveyer 5 consisting of a sheet of material preferably spring metal having its marginal edges 8 and 9 extended back or coiled toward each other to provide a conveyer or conduit of conical form, said conveyer tapering from the end 6 to the end 7. The purpose of this is to permit the end 7 of the conveyer to be disposed in the end 6 of an adjacent conveyer so that a conduit of any length may be formed to convey the sap to a single receptacle B.

The longitudinal marginal edges 8 and 9 of the conveyer are disposed in confronting relation, and are intended to be separated to permit the entrance of the end of the spout. By this means, it is not necessary to fasten the spouts to the conveyer as the resiliency of the conveyer prevents disengagement of the same from the spouts. To further assist in properly positioning the ends of the spouts within the conveyer, the marginal edge 9 is provided with a plurality of spaced recesses 10. The recesses are formed for the purpose of providing stops or shoulders 11 so that when the ends of the spouts are inserted in the conveyer the stops 11 engage the sides of the spout to limit insertion of the spout and thereby position the end thereof centrally of the conveyer, so that the sap may be readily discharged as the end of the spout or spouts is prevented from engaging the opposite wall of the conveyer.

In the use of the device, the desired number of spouts A are disposed in the trunk of a tree. The marginal edges 8 and 9 of the conveyer are then separated a sufficient distance to permit the insertion of the ends of the spouts so that the spouts extend in right angular relation to the conveyer. One of the spouts is intended to support the receptacle B. In this way, the sap is taken from several sources simultaneously and deposited in a single receptacle, thereby facilitating

the filling of the receptacle, and reducing the number of receptacles used. If desired, a separate spout C of conventional form may be used to support the bucket or receptacle so as to thereby provide another source of supply.

The conveyers and spouts may be arranged in various ways, for instance, as shown in Fig. 4, one spout can be positioned on each side of the bucket with a conveyer leading from each set of spouts toward each other, to a single receptacle and a separate spout used to support the bucket. Another manner is shown in Fig. 3 which consists in placing a number of spouts substantially in an inclined position and disposing the end 7 of one conveyer in the end 6 of an adjacent conveyer to thereby provide a relatively long conduit having one discharge end through which the sap passes into a single receptacle supported by the end spout or by an additional spout.

From the foregoing it will be readily seen that this invention provides a novel means of sap gathering which clearly facilitates the work by conveying enough sap to permit rapid filling of the buckets, and at the same time eliminating the number of buckets previously used. In addition to this the sap, as it passes through the conveyer, is protected from all forms of foreign matter in view of the conical formation thereof and as its construction is simple and no fastening means are used, it may be readily applied by anyone and used indefinitely. Another important feature is that the spouts extend a sufficient distance from the tree to allow for the curvature of the tree so that the position of the conveyers is not interfered with.

What is claimed is:—

1. A device of the character described comprising one or more spouts having one end of each spout disposed in a tree, a conical conduit member, one end of the spout being disposed in the side of said conduit member.

2. A device of the character described comprising one or more spouts having one end of each spout disposed in a tree, and a conduit member consisting of a sheet of material extended back upon itself to provide an annular conduit, the opposite ends of the spouts being disposed between the longitudinal edges of the conduit member.

3. A device of the character described comprising one or more spouts having one end of each spout disposed in a tree, a conveyer consisting of a sheet of material coiled upon itself to provide a conical conveyer, one of said longitudinal marginal edges having a plurality of spaced recesses adapted to receive the opposite ends of the spouts whereby the spouts are limited in their movement inwardly of the conveyer.

In testimony whereof I hereunto affix my signature.

LEON S. BLOOD.