To all whom it may concern: 

Be it known that I, WILLIAM J. STANSBURY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Liquid-Applying Cans, of which the following is a specification.

It is well known that in factories, machine shops and other places using power transmission mechanisms and machines which are driven by belts, it is often necessary to apply liquid to the belts for the purpose of de-greasing them and for otherwise increasing their efficiency. This application of liquid is usually done while the belts are in motion for two principal reasons, first it would result in a great loss of time if the belts were stopped and, second, it permits the liquid to be more evenly distributed throughout the lengths of the belts. In view of the fact that parts of machinery are often congested or closely positioned and often travel at a high rate of speed it can be readily deduced that it is dangerous work to apply such liquid and especially since the workman is often required to stand on a ladder and extend and twist his arm into various awkward positions in order to apply the liquid. Very often he is required to extend his arm through, over, under, or between closely positioned belts, shafts and pulleys in order to reach and apply liquid to another belt.

Many injuries, some of which have been fatal, have occurred merely from the fact that the workman touched a moving belt with the liquid-applying can; the result being that the workman started and temporarily losing his senses and balance, was caught bodily in the machinery.

Furthermore the liquid applying cans used prior to my present invention were such that the workman could not in any practical and convenient manner, regulate or control the amount of flow of the liquid out of the can and for this reason belts often received too much or too little liquid.

One object of my present invention is to provide a can which is particularly well adapted for the purpose of applying liquid to such belts as above mentioned; the can being so constructed that it can be conveniently used and will insure safety to the workman.

Another object is to provide such a can which can properly supply said liquid when the can is held in various positions; thus enabling the workman to safely reach belts in ordinarily inconvenient positions.

A further and specific object is to so shape my improved can that even if it should come in contact with the moving belt, the can will not be knocked or drawn from the hand of the workman.

These objects and other advantageous ends which will be described hereinafter, I attain in the following manner, reference being had to the accompanying drawings in which—

Figure 1 is a longitudinal elevation of my improved liquid-applying can.

Figure 2 is an end elevation of said can looking in the direction of the arrow z in Figure 1.

Figure 3 is an enlarged fragmentary elevation of the spout or nozzle end of my improved can.

Figure 4 is a section taken on the line 4—4 of Figure 3.

Figure 5 is a detail elevation of a combined valve sleeve and stopper used in connection with said spout of the can.

Figure 6 is a transverse section on the line 6—6 of Figure 5.

Figure 7 is a perspective view showing one position in which the can can be held to apply liquid and

Figure 8 is a view of similar character to Figure 7 showing another position in which the can can be held to apply liquid to a belt.

Referring to the drawings, my improved can includes a main hollow body portion or receptacle 9 which may be made of sheet metal preferably having a substantially flat top 10 with opposite side portions 11 which merge into a curved bottom 12; said bottom being arcuate in cross section preferably on an arc concentric to the axis of the spout 13 which is screwed on the nipple extension 14 which projects from the front side 15 of the receptacle; said front side being substantially at right angles to the top 10 and sides 11 and parallel with the rear side 16. A handle 17 projects upwardly from the top 10 and is elongated in the direction of the length of the receptacle and spaced above said top 10. Thus in holding the can, the workman can grasp the handle by the fingers and press his thumb upon the top surface 10 at one side of the handle and thereby secure a good grip and also secure a leverage to permit the can to rocked on the axis of
the curved bottom 12 and the spout 13, which action is particularly advantageous during the use of the can. The outer end portion 13 of the spout 13 is preferably made cylindrical and the extreme outer end 18 of the portion 13 of the spout is open.

A combined valve sleeve and stopper 19 includes a hollow cylinder or sleeve portion 20 having an external diameter such as to slidably but frictionally fit within the portion 13 of the spout 13 substantially in the same manner as one section of a collapsible telescope slides within an adjacent section.

The inner end 21 of the sleeve is open and the outer end 22 of said sleeve is closed and provided with a cap 23 of larger diameter than the internal diameter of the portion 13 of the spout 13. This cap 23 can be made integral with the sleeve 20 or soldered or otherwise secured to the end 22 and forms a shoulder 24 which, when the sleeve is pushed its full length within the spout, abuts the end 18 thereof. The sleeve 20 has an aperture 25 within its length which extends in the direction of the length of the spout and is of such distance from the end 21 of the sleeve that the sleeve can be pulled part way out of the spout to expose the entire aperture 25 without possibility of the entire sleeve accidentally falling out of the spout. In addition to sliding longitudinally within the spout, the sleeve 20 can be turned relatively to the spout so that the aperture 23 can be turned into various positions relatively to the receptacle 9.

From the foregoing description it is obvious that if the receptacle 9 is filled with liquid and the sleeve 20 is part way withdrawn to expose all or a portion of the aperture 25 that the liquid will run from the receptacle 9 outward through the spout 13 and then outward through the aperture 25. Furthermore it is obvious that the distance which the sleeve 20 is pulled out of the spout will vary the amount of the aperture 25 exposed so that the stream of liquid emanating from the aperture 25 can be varied. It is also obvious that if the sleeve 20 is pushed into the spout 13 so that the entire aperture 25 is within the spout that the spout will be closed; such position being shown in dot-and-dash lines in Figure 1.

In ordinary use in applying the liquid from the can to a belt, the can is held in the position shown in Figure 7 with the top 10 uppermost and with the sleeve 20 turned so that the aperture 25 is at the lowest portion of the spout. This presents the curved bottom 12 of the receptacle toward the belt and consequently presents a curved smooth surface so that if the bottom of the receptacle 12 or the sides 11 should touch the belt, there are no projecting corners which would cause the can to be knocked or pulled out of the hand of the workman especially since the structure is such that the workman can hold the receptacle with the grip and leverage above mentioned. If, as sometimes occurs, it is not possible for the workman to hold the can in an upright position depending from the hand he can readily change the can's position such as for example as by swinging it about the axis of the spout 13 and curved bottom 12; one of such positions being shown in Figure 8. The workman merely by turning the sleeve 20 relatively to the spout 13 can then move the aperture 25 into a position so that it will occupy a position at the bottom of the sleeve and consequently permit the stream of liquid to flow directly downward to the belt. It is a very easy matter to vary or regulate the amount of liquid or size of the stream flowing from the can since it is merely necessary for the workman to slightly push or pull on the cap 23 in order to provide a proper amount of opening of the aperture 25.

By having a can constructed in accordance with my invention as above described, a workman can quickly close the spout after use, merely by pushing the sleeve inward. It is therefore obvious that this use of the sleeve alone renders my can superior to cans which have closure caps and stoppers which must be entirely removed from the spout when the can is to be used and which often become lost or misplaced.

In actual practice and use of the device, it is found that there is practically no condition under which a workman cannot safely and conveniently use the can of my present invention as above described.

While I have described my invention as taking a particular form, it will be understood that the various parts of my invention may be changed without departing from the spirit thereof, and hence I do not limit myself to the precise construction set forth, but consider that I am at liberty to make such changes and alterations as fairly come within the scope of the appended claims.

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

1. A receptacle for applying liquid to a travelling object, such as a belt, including a receptacle having its bottom curved in cross section; a rectilinear tubular spout for said receptacle mounted approximately concentrically with the axis of said bottom; and a tubular member near the end of said spout providing an axially adjustable pouring aperture.

2. A receptacle for applying liquid to a travelling object, such as a belt, including a receptacle having its bottom curved in cross section; a rectilinear spout for said receptacle mounted approximately concentrically.
with the axis of said curved bottom; and a tubular sleeve having its outer end closed, movably mounted in the outer end of said spout, and being provided with a pouring aperture.

3. A receptacle for applying liquid to a travelling object such as a belt, including a receptacle having its bottom curved in cross section; and a flat top; a handle secured to said top; a rectilinear spout on said receptacle mounted approximately concentrically with the axis of said bottom; and a tubular sleeve having its outer end closed movably mounted in the end of said spout, and being provided with a pouring aperture.

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

WILLIAM J. STANSBURY.

Witnesses:

ELIZABETH GARBE,

CHAS. E. POTTS.