Dec. 13, 1955 R. C. DICKERSON 2,726,630

MACHINE FOR APPLYING ASPHALT TO ROOFING, FLOORING, AND THE LIKE

Filed May 19, 1953

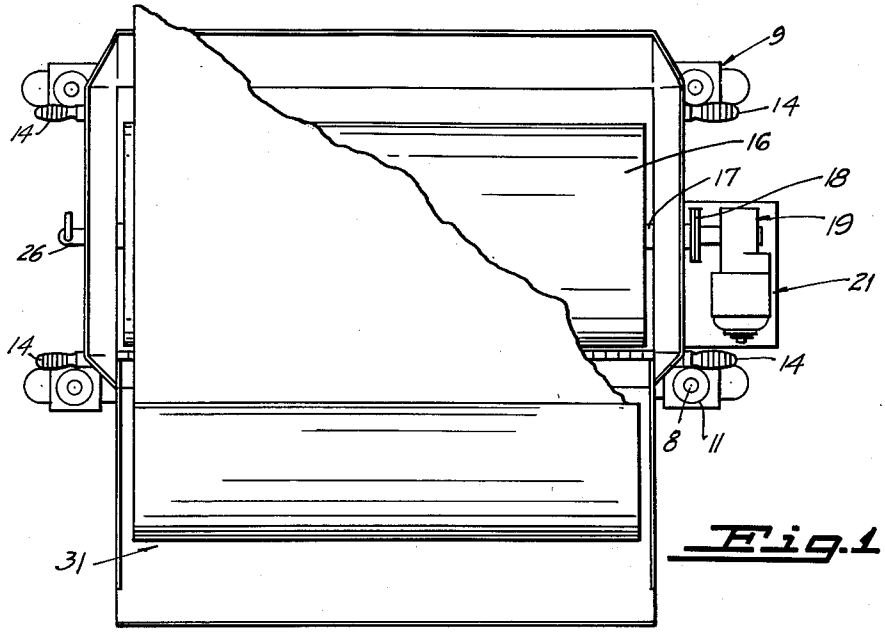


Fig. 1

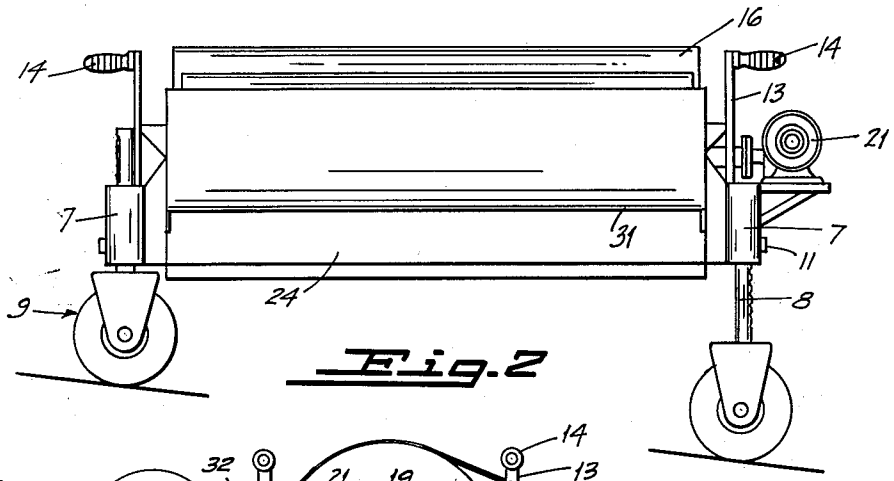


Fig. 2

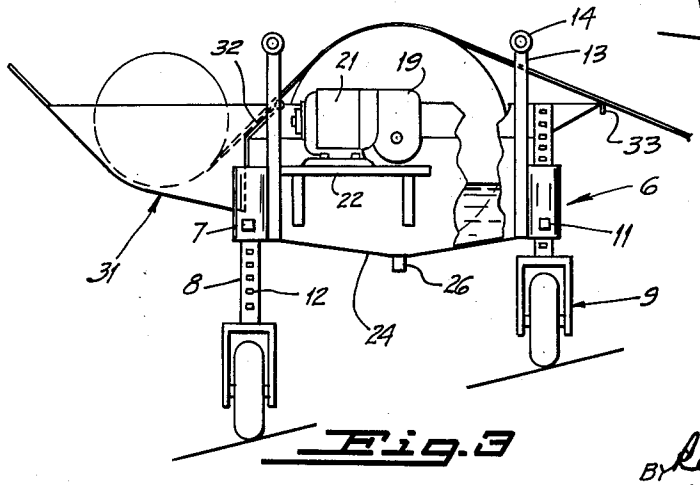


Fig. 3

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MACHINE FOR APPLYING ASPHALT TO ROOFING, FLOORING, AND THE LIKE

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1 Claim. (Cl. 118—235)

This invention relates to machines for applying asphalt and the like to a strip of paper and the like as utilized in roofing, flooring and the like.

As part of the procedure for preparing roofing or flooring paper for application to a surface, it is usual to apply asphalt or a like fluid to one face of the paper, such application usually being made with hand manipulated mops, swabs or the like. The application of the asphalt resulting from the use of mops and swabs is uncertain in that a uniform quantity of the asphalt may not be applied to all areas of the paper strip. In accordance with this invention, I provide a machine which enables a substantially uniform quantity of the moistening fluid, e. g., asphalt, to be applied to the strip of flooring or roofing.

It is in general the broad object of the present invention to provide a novel machine for applying a moistening substance such as asphalt to a strip of paper for subsequent application to a roof, floor, or the like.

A further object of the present invention is to provide a novel construction for an asphalt applicator.

The invention includes other objects and features of advantage, some of which, together with the foregoing, will appear hereinafter, wherein the present preferred form of asphalt applicator is disclosed. In the drawing accompanying and forming a part hereof, Figure 1 is a plan view showing an applicator embodying the present invention.

Figure 2 is a front elevation of the applicator shown in Figure 1.

Figure 3 is a side elevation of the applicator shown in Figures 1 and 2 with a portion thereof broken away.

Referring to the drawing which accompanies and forms a part hereof, the device includes a suitable frame structure generally indicated at **6** and having at each of its four corners vertical tubular supports **7** through which pass rods **8**. A wheel structure, generally indicated as **9**, is mounted on each of the rods **8**. The relative position of the wheels with respect to the tank can be altered by adjusting stops **11** in supports **7** to engage a selected notch or recess **12** on a rod **8** so that the structure can be positioned with the frame horizontal even though the device is supported upon a roof or other structure at a considerable angle to the horizontal, as is indicated in Figure 3.

Mounted adjacent each of the four corners of the frame **6** are vertical extensions **13** upon which horizontal handles **14** are provided to enable the device to be moved about as desired.

A drum **16** is mounted upon a shaft **17**, the latter being supported in suitable bearings, not shown, in the frame **6**. One end of the shaft **17** extends beyond the frame and is connected through a flexible coupling **18** to a gear reduction drive **19**, the latter being in turn driven by a prime mover, generally indicated at **21**; in this case, an electric motor. The gear drive **19** is mounted directly upon the electric motor **21** and the latter is mounted upon a suitable shelf, generally indicated at **22**, and mounted upon the side of the frame, as appears in Figures 2 and 3.

Frame **6** includes a tank structure within its confines, the tank being generally indicated at **24**, and including a drain **26** from the lowest portion thereof. The tank **24** is filled to a normal liquid level and the drum **16** depends well below this liquid level so that upon rotation the drum picks up a film of the liquid about its periphery.

A roll paper support in the form of a receptacle, generally indicated at **31**, is mounted upon one side of the frame **6**. The web of paper drawn from the roll is extended upwardly over transverse guide **32**, then about the upper periphery of the drum and then downwardly over a horizontal shelf **33** on the far side of the drum.

In use, the tank **24**, being filled with liquid to its normal liquid level and power being supplied to the prime mover **21**, the drum **16** is rotated positively. This ensures that it picks up a continuous film from the tank and supplies this to the strip of paper drawn from the roll supported on the side of the machine. Irrespective of the rate at which one pulls the paper strip over the applicator drum, the strip of paper is uniformly and adequately wetted with the asphalt, thus ensuring a good bond when the paper is subsequently positioned on the floor or roof. Excess material is wiped away by the applicator drum rotating past the paper, if, for example, the paper be permitted to rest for any length of time upon the roll without being drawn past the roll. When the desired length of paper has been drawn over the drum, the length is severed by drawing a knife along the edge of shelf **33** to cut the paper.

From the foregoing, I believe it will be apparent that I have provided a novel and improved and simplified construction for a device for applying asphalt to a strip of paper.

I claim:

A machine for applying asphalt to the entire width of a roll of roofing paper comprising a tank having a normal liquid level for containing liquid asphalt solution, a moistening roller rotatably carried by the tank and partially disposed below the normal liquid level of the tank, power means for driving the roller positively and independently of roofing paper movement with respect to the roll, said roller being at least as wide as the roofing paper to be moistened, a guide carried on one side of the moistening roller over which a strip of paper is extended to pass to the moistening roller, support means cooperatively adjacent to the tank for supporting a roll of paper for movement over the moistening roller, a horizontal shelf located parallel to and adjacent said roller on the opposite side of said roller from said roll paper support, said shelf sloping into said tank whereby asphalt solution deposited on said shelf will flow into said tank, and support means for said machine comprising adjustable legs having wheels thereon.

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