March 10, 1959 F. M. MOORE 2,876,730

TAPE COATING APPARATUS

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Fig. 1

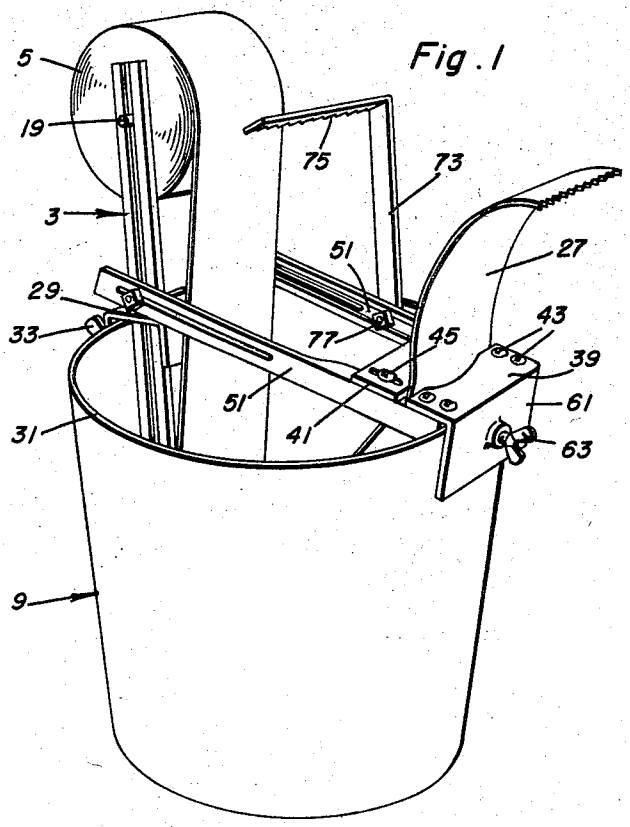
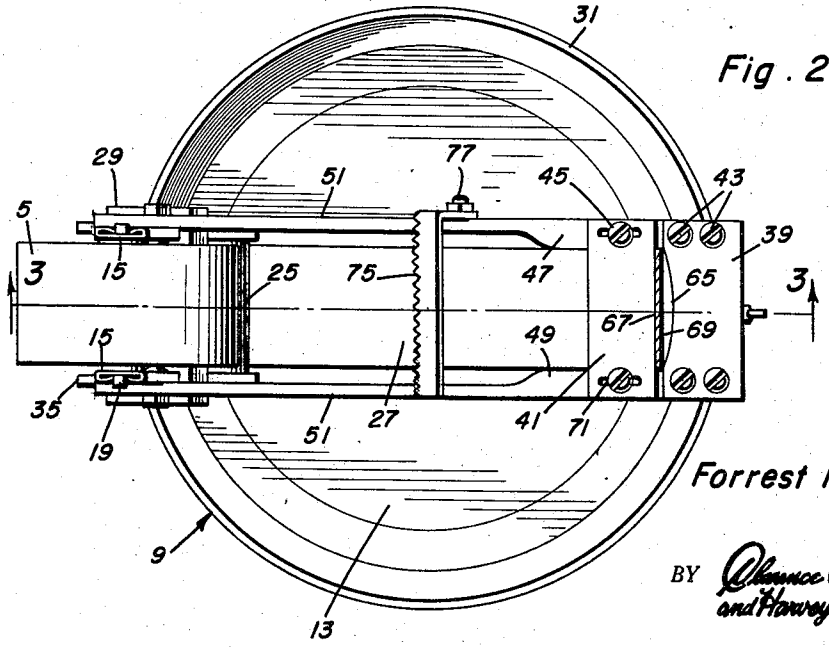


Fig. 2



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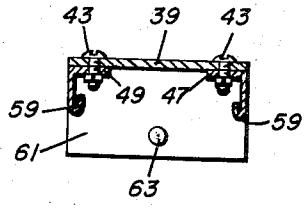
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Fig. 5



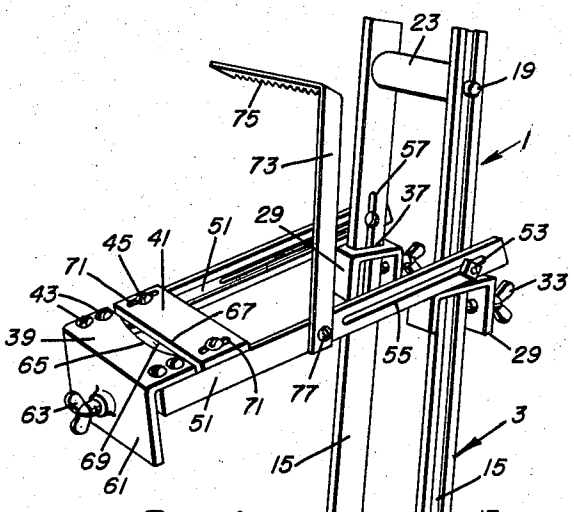


Fig. 4

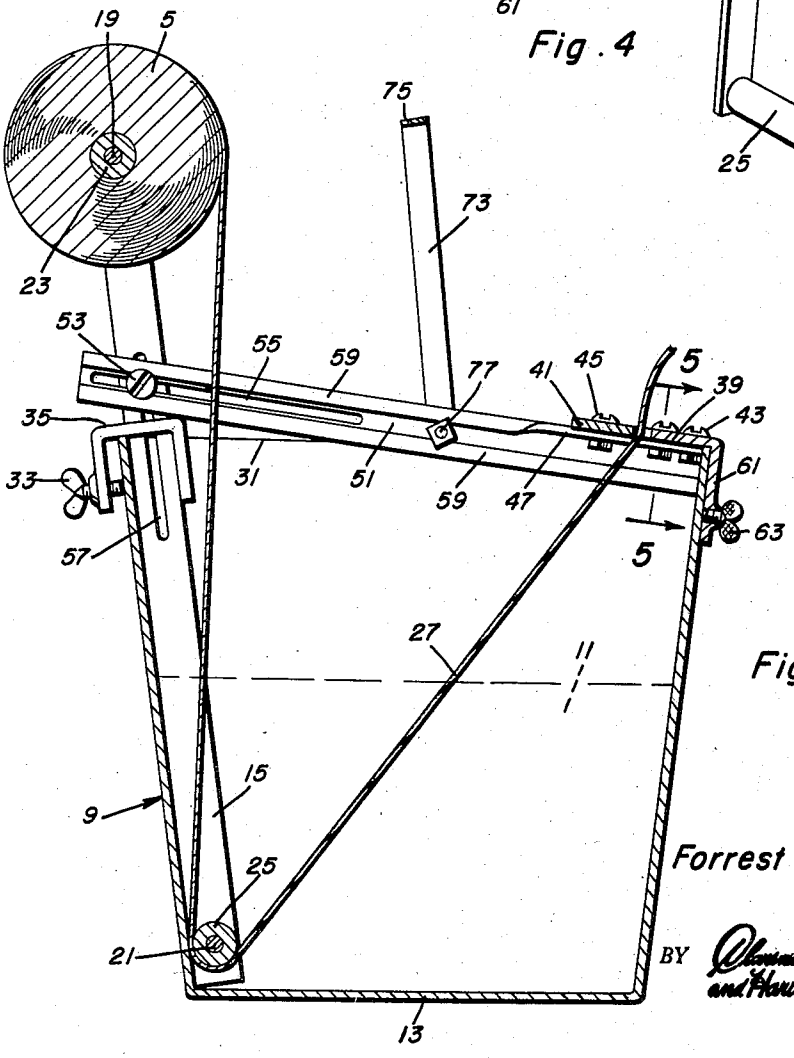


Fig. 3

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TAPE COATING APPARATUS

Forrest M. Moore, Victoria, Tex.

Application February 8, 1957, Serial No. 639,113

1 Claim. (Cl. 118—43)

My invention relates to improvements in apparatuses for applying an adhesive coating of crack filling compound to builder's wallboard tape.

The primary object of my invention is to provide an apparatus for easy quick attachment to a bucket, or the like, to guide wallboard tape as it is pulled from a roll downwardly in a bucket of crack filling compound to the bottom of the bucket to coat the tape and utilize all of the compound, and which includes scraper means for cleaning the tape, substantially, of compound on its front side and shaping a coating on the rear side of the tape so that it is thicker in the center of the rear side to facilitate filling cracks between wallboard, all to the end that such tape may be more rapidly, conveniently and efficiently coated for filling cracks.

Still another object is to provide an apparatus for the above purposes which is of simple construction, economical to manufacture, light in weight, yet durable, and adapted for attachment to buckets of different sizes.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a view in perspective of my improved apparatus in a preferred embodiment thereof attached to a bucket;

Figure 2 is an enlarged view in plan, partly in section, of the same;

Figure 3 is a view in vertical transverse section taken on the line 3—3 of Figure 2;

Figure 4 is a view in perspective of the apparatus detached; and

Figure 5 is a view in vertical transverse section taken on the line 5—5 of Figure 3.

Referring to the drawings by numerals, the apparatus of my invention, designated generally by the numeral 1, comprises an elongated rectangular frame 3 for supporting a roll 5 of builders tape, and a tape guide roller. The frame 3 is adapted to be stood on end, in upright position in a bucket 9 of crack filler compound 11 to rest on the bottom 13 of the bucket and against one side thereof and project above said bucket to correspondingly support the roll 5.

The frame 3 comprises a pair of laterally spaced bars 15 having rolled over longitudinal edges 17, for reinforcing purposes, upper and lower cross rods 19, 21 threaded into and cross connecting the upper and lower ends of the bars 15, and upper and lower rollers 23, 25 on the rods 19, 21 between said bars 15. The upper roller 23 is adapted to support the roll 5 of tape 27 which is trained downwardly and under the lower roller 25 for guiding by said roller 25 to a point adjacent the bottom 13 of the bucket and compound 11.

Means is provided for attaching the frame 3 to the bucket 9 comprising a pair of downwardly opening U-clamps 29 on the bars 15 for hooking on the rim 31 of the bucket 9 and which are provided with thumb screws 33 for turning against the outer side of said bucket 9. For positioning the clamps 29 over the rim 31 of buckets 9 of different heights, the clamps 29 are provided with bight portions 35 slotted, as at 37 and through which said bars 15 extend and whereby said clamps 29 are vertically slidably adjustable on said bars 15.

The scraper means comprises a pair of front and rear scraper blades 39, 41 adapted to be supported, by means presently described, at the side of the bucket 9 opposite that against which the frame 3 rests and in coplanar relation crosswise of the tape 27. The scraper blades 39, 41 are secured at their ends by screw bolts 43, 45 to lateral flanges 47, 49 on the front ends of a pair of laterally spaced bars 51.

The bars 51 straddle the pair of bars 15, extend laterally therefrom in parallel relation across the top of the bucket 9 into abutting relation to said opposite side of the bucket 9. Screw bolts 53 extend through longitudinal slots 55, 57 in the bars 51, 15 and attach the rear ends of the bars 51 to the bars 15 above the clamps 29 for vertical and longitudinal adjustment of said bars 51 relative to the frame 3 for supporting the scraper blades 39, 41 at the related side of buckets 9 of different heights and diameters. The bars 51 are also provided, for reinforcing purposes with rolled over longitudinal edges, as at 59.

A downturned front edge flange 61 is provided on the scraper blade 43 to overlap the rim 31 of the bucket 9 and the flange is provided with a thumb screw 63 therein for turning against the bucket 9, whereby to clamp the front ends of the bars 51 against said bucket 9, and together with bolts 53 properly position the scraper blades 39, 41 at the proper side of said bucket.

The scraper blades 39, 41 are provided with confronting, spaced apart longitudinal edges 65, 67 forming a slot 69 therebetween through which the tape 27 is trained upwardly from the roller 25 obliquely through the compound 11. The edge 65 of the front scraper blade 39 is concave, so that a coating on the rear side of the tape 27 will be rounded transversely of the tape to facilitate filling a crack behind the tape. The edge 67 of the rear scraper blade 41 is straight to scrape the front side of the tape 27 substantially clean of compound or to leave a thin coating thereon. Slots 71 in the rear scraper blade 41 through which the screws 45 extend provide for adjusting said blade 41 toward the front blade 39 for varying the width of the slot 69 to fit the edges of tapes 27 of different thickness, with a slight clearance.

A right angled cutter bar 73 extends upwardly from one bar 51 between the frame 3 and the scraper blades 39, 41 and is provided with a serrated upper end 75 extending horizontally transversely over said bars 51 and facing the frame 3. A screw bolt 77 attaches the bar 73 to its bar 51.

The operation of my apparatus will be readily understood. The tape 27 is pulled from the roll 5 downwardly through the compound 11 to the roller 25 from which it is pulled upwardly through the compound out of the slot 69 in scraping engagement with the straight edge of the rear scraper blade 41. As it is thus pulled, it is coated on both sides and a thicker coating is provided on its rear side which is rounded transversely of said rear side for the purpose previously described. When a sufficient length of tape 27 has been thus coated, it is led backwardly and upwardly from the slot 69 around the serrated end 75 of the bar 33 and severed against said end 75 for application of the severed length of tape to builder's wallboard.

The foregoing is considered as illustrative only of the principles of the invention. Further, 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 and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

Apparatus for coating wallboard tape with adhesive compound comprising a pair of upright laterally spaced bars having free upper and lower ends and adapted to be stood in a bucket of adhesive compound on the bottom and against one side of a bucket, clamps on said bars for securing to the rim of a bucket to fasten the upright bars in a bucket, roller means cross connecting said free upper ends of said upright bars for supporting therebetween a roll of adhesive tape, guide means cross connecting said lower ends of the upright bars and under which the adhesive tape pulled from said roll may be trained upwardly through the compound, a pair of laterally spaced vertically swingable bars extending at an angle from said upright bars and having corresponding ends pivoted to said upright bars for swinging of

said swingable bars downwardly crosswise of the top of the bucket, a pair of spaced apart scraper blades cross connecting the other ends of the swingable bars for scraping the excess compound from the tape pulled therethrough and being swingable downwardly by downward swinging of said swingable bars to seat one of said blades on the rim of a bucket, means on said one blade attachable to a bucket to hold the swingable arms and scraper blades in downswung position, and a right angled cutting member upstanding from one of the swingable bars for severing tape thereagainst pulled upwardly between said scraper blades.

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