

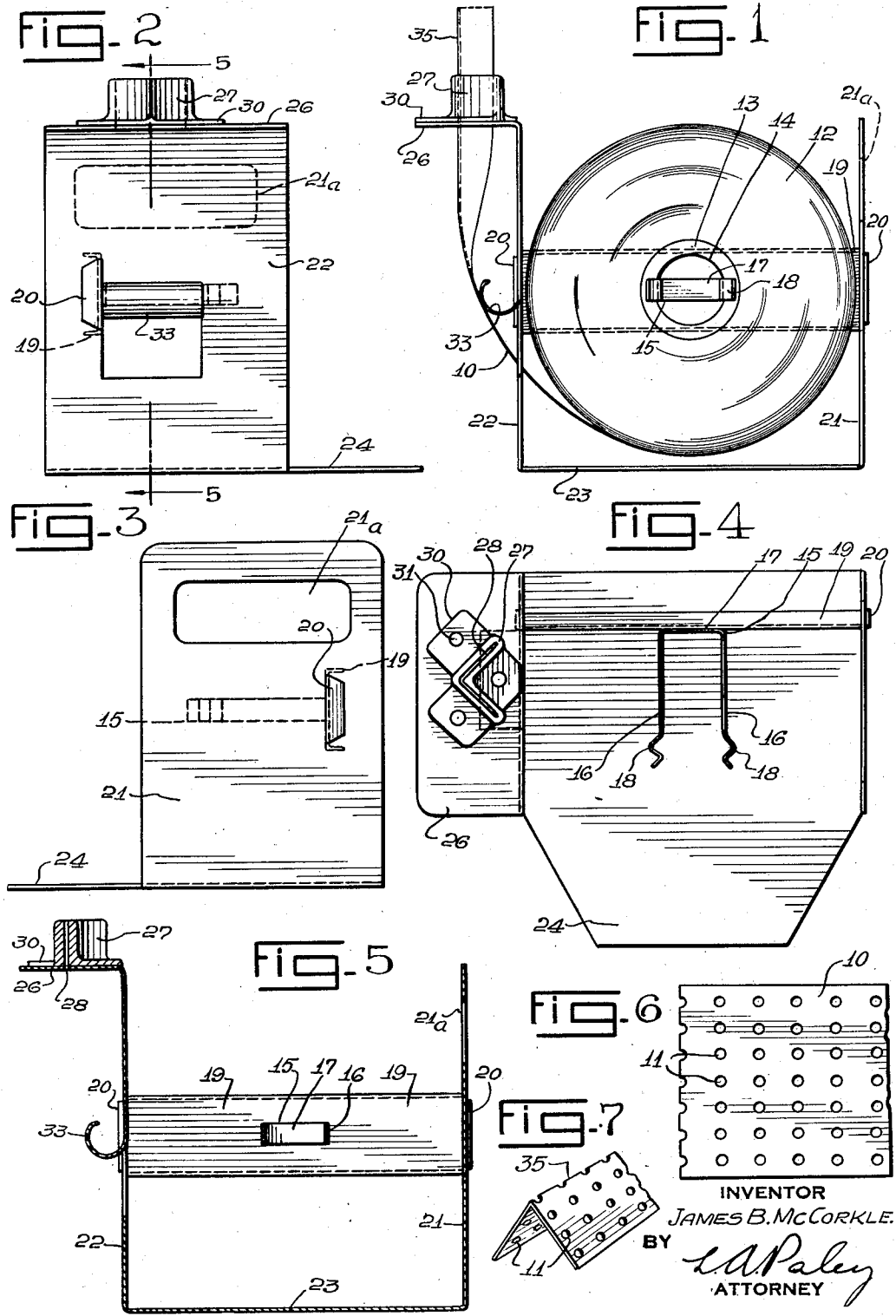
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J. B. McCORKLE

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FORMING TOOL FOR METAL TAPE

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FORMING TOOL FOR METAL TAPE

James B. McCorkle, Atlanta, Ga., assignor to
United States Gypsum Company, Chicago, Ill.,
a corporation of Illinois

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This invention relates to forming tools, and has reference more particularly to tools of the class described for forming flat metal foil into angular shapes for use in reinforcing the corners of rooms to prevent cracking of plastic paint.

In the construction of the walls of buildings in which plaster board or fiber board is used as a base for plastic paint, it is the preferred practice to apply over the joints between adjoining boards, a perforated metal foil which is adhesively attached to the board joint by means of a cementitious joint plaster. The sort of construction to which reference is made is particularly described in the patent to E. Green, No. 1,703,667, entitled "Wall board joint system", granted February 26, 1929. In the corners of the room, it is necessary to form the metal foil tape into angular form with the wings of the angle lying in a plane without waves or corrugations. It is a difficult operation to accomplish this forming of the metal tape by hand and secure the best results with a minimum of labor.

An object of this invention, therefore, is to provide a forming tool for metal tape, which will quickly and easily form the metal tape into angular cross-section form.

Another object of the invention is to provide a forming tool for metal tape, which will be economical to construct and which may be used from day to day without appreciable wear or loss of parts; also to improve forming tools in other respects hereinafter specified and claimed.

Reference is to be had to the accompanying drawing forming a part of this specification, in which

Fig. 1 is a side elevation of the forming tool,

Fig. 2 is an end elevation of the forming tool,

Fig. 3 is another end elevation of the forming tool,

Fig. 4 is a plan view of the forming tool,

Fig. 5 is a sectional elevation through the forming tool with a roll of metal tape removed, taken on line 5—5 of Fig. 2,

Fig. 6 is a face view of a portion of flat metal perforated tape, and

Fig. 7 is a perspective view of a section of tape formed into angular cross-sectional shape.

Tape 10 to be formed by my improved tool, is composed of zinc or other suitable metal, and is manufactured in widths of about 2' more or less. The tape is provided with perforations 11 so that the adhesive, cementitious composition used for applying the tape to the joints of wallboard is permitted to dry out through the perforations in order to set to solid form. The foil strip 10 is formed into rolls 12, which are supported on a cylindrical hub 13 having a central opening 14. A resilient roll carrier 15 is provided with a pair of spaced resilient arms 16 which are connected at one end by a web 17. The outer ends of the

arms 16 are provided with catches 18 which serve to engage the outer end of the hub 13 and prevent axial movement of the roll 12 during the unwinding of the tape 10. The web 17 is secured, as by spot welding, to the web of a channel 19, the outer ends of said channel having transversely extending flanges 20 which extend through slots formed in upstanding arms 21 and 22 of a supporting frame, the lower ends of said arms being connected by a base member 23. The base 23 has an outstanding section 24 which is engaged by the foot of the workman so as to hold the forming tool in position on the floor while in operation.

The upper end of the leg 22 is provided with an outstanding flange 26 upon which is mounted an angularly shaped die 27 provided with a dog-legged, angular forming slot 28 through which the tape 10 is caused to pass. The die 27 has outstanding base flanges 30 which are secured to the frame flange 26 by rivets or bolts 31. An arcuate shaped outstanding flange 33 is struck from the metal of the frame leg 22 and is arranged to be engaged by the tape 10 as it unwinds from the roll 12 so as to cause said tape to approach the die 27 perpendicularly regardless of the diameter of the roll 12. As the tape 10 passes through the die 27, a longitudinal 90° fold 35 is formed in the tape so that the tape will fit the corner of a room. The tape is applied to the board joint at the corner of the room by a suitable adhesive composition and the tape is torn off at the upper edge of the forming die 27. The top of the die 27 is preferably slightly less than 8' from the floor which is the customary height of a standard base board, thus insuring that the torn bottom end of the tape 10 will substantially register with the top of the base board. An aperture 21a is formed in the frame leg 21 to form a handle to be grasped by the workman in carrying the tool from place to place.

I would state in conclusion that while the illustrated example constitutes a practical embodiment of my invention, I do not wish to limit myself precisely to these details, since manifestly, the same may be considerably varied without departing from the spirit of the invention as defined in the appended claims.

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

1. In a tool for forming metal tape, means for supporting a roll of metal tape on a floor, a base on said supporting means arranged to be held flush on the floor by the foot of a workman, and means associated with said supporting means for folding said tape longitudinally as said tape unwinds from the roll.

2. In a tool for forming metal tape, a U-shaped, metallic, supporting frame having upstanding legs and a base, a cross member connecting said

legs, means on said cross member for rotatably supporting a roll of metal tape, an outstanding flange formed on one of said legs, a die supported on said flange for folding longitudinally tape unwound from said roll, and a section on said base to be engaged by the foot of a workman.

3. A readily shiftable, unitary tool for forming metal tape, comprising a pair of spaced frame members, a member spanning said frame members, a pair of spaced resilient legs secured to said last mentioned member and arranged to form a yielding hub for a roll of metal tape, said hub serving as a brake to retard the unwinding of said roll of tape, and a die secured to said frame and having an angular slot for folding said tape longitudinally during the unwinding thereof into a pair of angularly meeting wings.

4. In a tool for forming tape into angular shape, a substantially U-shaped, metallic supporting frame having upstanding legs and a base, a cross member connected to said legs, means on said cross member for rotatably supporting a roll of metal tape, an outstanding flange formed on one of said legs, and means supported on said flange for receiving and longitudinally folding tape unwound from said roll.

5. A device for creasing a flat tape strip to assume a longitudinally angular shape, which comprises a substantially U-shaped frame member having upstanding legs and a base, means for receiving a roll of tape in rotatable fashion between said upstanding legs, and means connected to said frame member and adapted to receive and longitudinally fold said tape as it is unwound from said roll.

6. A device for forming a flat tape strip into longitudinally angular shape, which comprises a substantially U-shaped frame member having upstanding legs and a base, means for receiving a roll of tape in rotatable fashion between said upstanding legs, a forming die connected to said frame member and adapted to receive and longitudinally fold said tape as it is unwound from a roll, and means for guiding said tape to said forming die in a constant plane as said roll diminishes in diameter.

7. A device of the character described, comprising a member adapted to rotatably receive a roll

of tape, means connected to said member for bending said tape longitudinally as said tape is drawn in engagement with said means so as to adapt said tape to fit a corner, means for engagement by the foot of an operator to hold said device in place while said tape is being drawn in engagement with said bending means, and means for manual engagement of said device for shifting the same.

8. In a device of the character described, a frame member including a pair of upstanding members, means for rotatably supporting a roll of tape between said upstanding members, and means for engagement with a base upon which said frame member is set, creasing means through which said tape is adapted to be drawn for longitudinally bending said tape into a pair of angularly meeting wings, means on one of said upstanding members for supporting said creasing means, means also on said one upstanding member for guiding said tape to said creasing means, and means on one of said upstanding members for convenient manual engagement of said device for shifting the same as desired.

9. In a device of the character described, means for carrying a roll of tape to permit said tape to unwind, a die having a body part in which the thickness is substantially less than the width, said die having a forming slot substantially following the relative dimensions of the cross section of the die, and a base on said die, said die base being connected to said means so that said die is in operative association with said means to receive a strip of tape from said roll to form said tape as it is drawn through said slot.

10. In a device of the character described, means for carrying a roll of tape to permit said tape to unwind, a die having a body in which the thickness is substantially less than the width, said die having a forming slot for receiving said tape to shape the same, said slot being substantially the width and thickness of the tape, the length of said body being considerably greater than its thickness whereby said tape will be ironed and straightened as it passes through said slot, and means for connecting said die in operative association with said means for carrying the tape.

JAMES B. McCORKLE.