March 1, 1955 J. H. PAYTON 2,703,133

PACKAGE SEALING IMPLEMENT

Filed Feb. 11, 1953

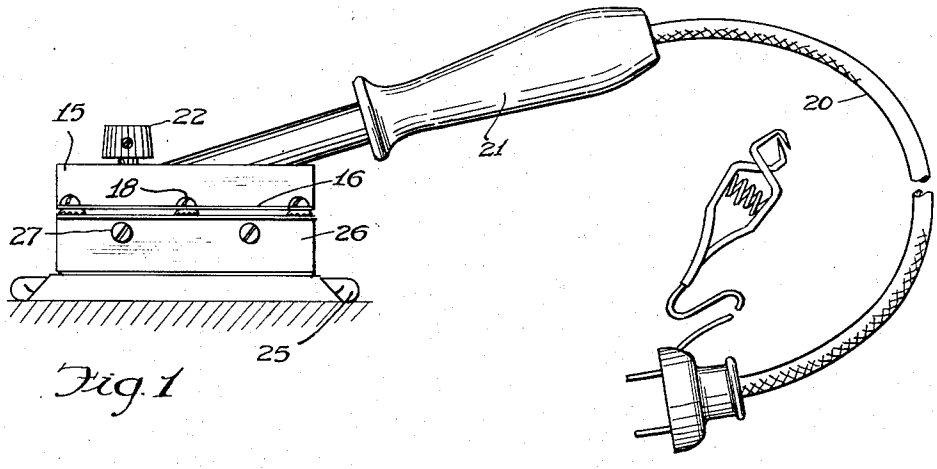


Fig. 1

Fig. 2

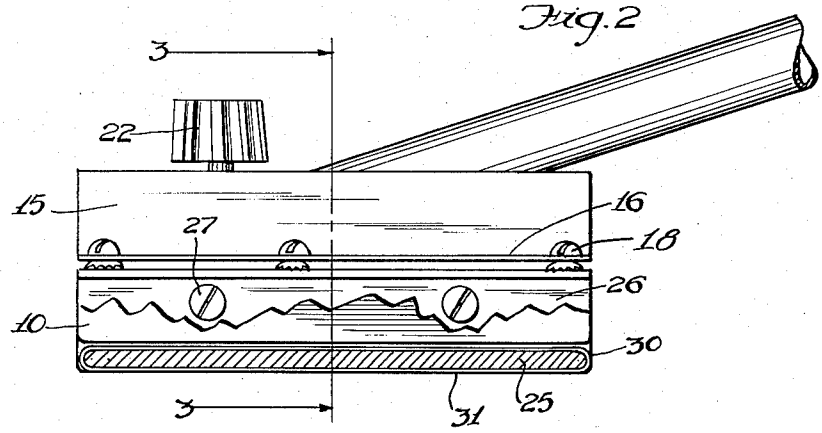
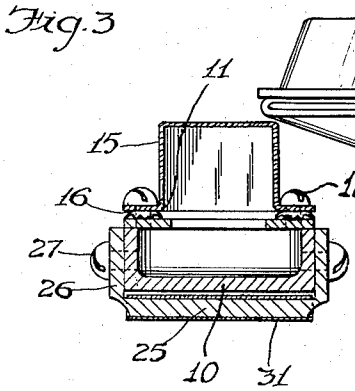


Fig. 3



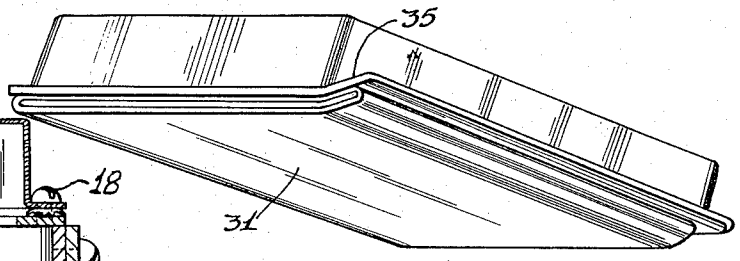


Fig 4

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PACKAGE SEALING IMPLEMENT

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5 Claims. (Cl. 154—42)

My invention relates to packages contained in heat-adhesive wrappers, and more particularly to means for sealing the latter. Ordinarily, a heated object is applied with an ironing movement to seal and press the package, but the movement of the sealing device often snarls, fractures or deforms the materials of the closing flaps of the package due to friction, so that an unsatisfactory closure or damaged package is made. In view of this disadvantage, it is one object of the present invention to provide an implement which may be used both as a sealer and press without disarranging or fracturing the closing flaps of the package.

A further object is to design the novel implement in the manner of a hand tool or appliance which may be moved continuously over the package being sealed with facility and without friction, whereby to improve and expedite the handling and sealing of such critical wrapping films as Pliofilm, acetates, polyethylene, or the like.

Another object is to construct the novel implement in a manner to apply a heated endless tape into contact and engagement with the package and retain the tape in stationary contact with the latter without friction while the heated implement is given a sliding motion over the same.

Another object is the elimination of friction between the contacting surfaces of the sealing implement and the package which prevents disturbing the printed matter usually present on packaged wrappers. Thus, the smearing of ink, which usually occurs where friction-type sealing irons are used, will be avoided.

An additional object is to design the novel implement along lines of compactness and simplicity.

With the above objects in view, a better understanding of the invention may be had by reference to the accompanying drawing, in which—

Fig. 1 is a side elevation of the implement;

Fig. 2 is an enlargement of the main portion thereof, partly in section;

Fig. 3 is a section on the line 3—3 of Fig. 2; and

Fig. 4 is a perspective view of a modification.

In accordance with the foregoing, specific reference to the drawing indicates the body portion of the implement at **10**, the same being in the nature of a housing. The latter has top flanges **11** for the support of a superimposed hood **15**, the latter having side flanges **16** which are secured to the top flanges **11** by screws **18**.

The housing **10** receives an electric heating unit—not shown—to which current is supplied by means of a cord **20** which leads into a handle **21** carried by the hood **15**. The latter contains a heat control—also not shown—the same being actuated by a knob **22**.

The effect of the heating unit and its control is to bring the housing **10** up to a temperature which is suitable for sealing and pressing heat-adhesive wrapping material. However, the housing is not applied directly to such material, but through the agency of a base **25** whose sides **26** are secured by bolts **27** to the sides of the housing **10**. The heat in the latter is therefore transmitted to the base **25**.

As noted in Fig. 3, the base **25** is slightly separated from the bottom of the housing **10**; also, Fig. 2 shows clearly that the base **25** is an elongated plate whose ends are rounded, as indicated at **30**. An endless tape **31** is wrapped longitudinally over the base and in slightly loose relation to the same. Thus, when the appliance is slid or run lengthwise over the work—as suggested in Fig. 1—the base **25** will lay the tape **31** over the work in caterpillar form and without movement or friction between the tape and the work. Obviously, the heat in the appliance and the pressure exerted on it will seal

the package whatever its length may be, and press the closing flaps down neatly. The tape is heat-resisting, nonporous, and of a hard-finished material.

In addition to the working function of the novel appliance it will be appreciated that its small size and portability enable it to be used at any point of application. In other words, the work need not necessarily be on a table or held down, but may be on any surface or even held in the hand; and it is conceivable that the appliance will seal and press any object which receives a heat-adhesive covering or closure in any position. The modification of Fig. 4 is a stationary unit designed for attachment to a support in any desired position. The work is intended to be applied to the unit, and the latter therefore has a larger surface than the article shown in Fig. 1. The bottom plate **25** is deflected at one side as shown at **35** to form a lead for the advance of the work onto and the engagement thereof with the outer run of the tape **31**. Small packages can thus be sealed and pressed with dispatch by being applied with a lateral pressing movement to the tape-exposing side of the unit.

An appliance is thus had which renders the sealing and pressing of work of the type under consideration an easy task capable of being accomplished by inexperienced persons, and that the appliance is an article which is made of few parts, facilitating its production on an economical basis.

While I have described the invention and its modification along specific lines, various other changes or refinements may be made therein without departing from its principle, and I reserve the right to employ all such changes and refinements as may come within the scope and spirit of the appended claims.

I claim:

1. An appliance for pressing and sealing heat-adhesive wrappers and the like comprising a member adapted to be heated, a plate attached in heat-conductive and spaced relation to the member, and an endless tape looped around the plate, the outer surface of the tape being applicable to the work and rolled into nonfrictional contact with the same as the appliance is moved relative to the work or the latter is moved relative to the appliance.

2. An appliance for pressing and sealing heat-adhesive wrappers and the like comprising a member adapted to be heated, a plate attached in heat-conductive and spaced relation to the member, and an endless tape looped around the plate, the outer surface of the tape being applicable to the work and rolled into nonfrictional contact with the same as the appliance is moved relative to the work or the latter is moved relative to the appliance.

3. An appliance for pressing and sealing heat-adhesive wrappers and the like comprising a housing adapted to be heated by an internal heating unit, an external plate attached in heat-conductive and spaced relation to the housing, and an endless tape looped around the plate, the other surface of the tape being applicable to the work and rolled into nonfrictional contact with the same as the appliance is moved relative to the work or the latter is moved relative to the appliance.

4. An appliance for pressing and sealing heat-adhesive wrappers and the like comprising a housing adapted to be heated, an external plate attached in heat-conductive and spaced relation to the housing, and an endless tape looped around the plate with flat runs along the inner and outer sides of the plate, the outer run of the tape being applicable to the work and rolled into nonfrictional contact with the same as the appliance is moved relative to the work or the latter is moved relative to the appliance.

5. The structure of claim 1, end loops of the tape sliding over end portions of the plate, and such end portions being rounded to facilitate the smooth travel of said end loops.

References Cited in the file of this patent

UNITED STATES PATENTS

2,424,558	Delano	July 29, 1947
2,609,316	Fichtner	Sept. 2, 1952