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A. G. S. LINDGREN

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WRAPPER

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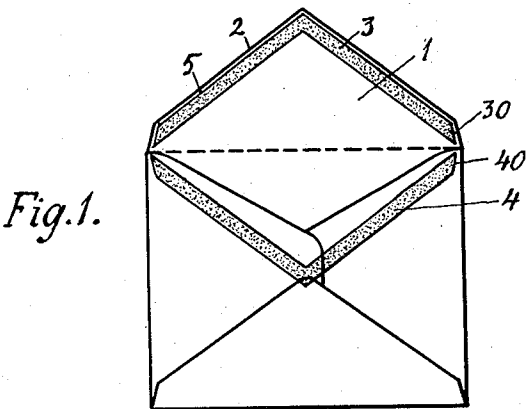
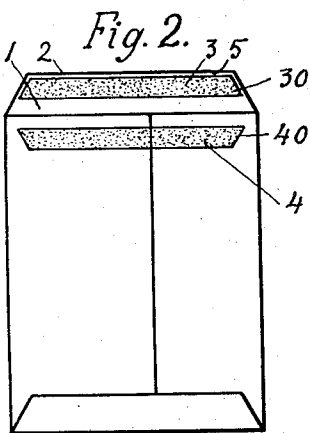
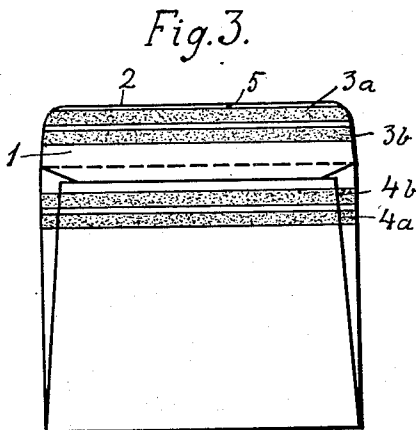
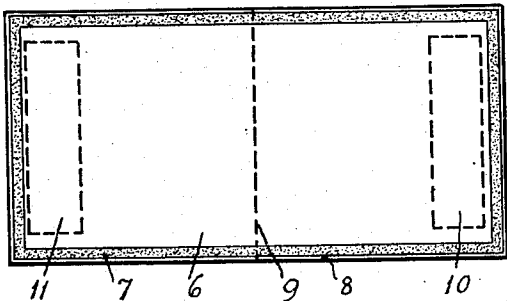


Fig. 4.



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For the closing of an envelope the use of a solution of rubber in benzole (C_6H_6) has been proposed, the solution being coated on both the parts of the wrapper, which shall form the closing means, and having the property that the coated parts, even after the drying of the adhesive solution, stick strongly to each other, when they are brought together, without being previously moistened, but do not stick to uncoated parts. Such envelopes have not come into use, owing to the fact that the coating has been applied right out to the free edges of the envelope in the same way as usual when gumming envelopes. When these envelopes have been collected into piles for storing or packing in boxes, the coated edges when coming into contact with each other have stuck together, making it impossible to separate the envelopes without spoiling them.

The present invention has for its object to make it possible to store envelopes and other covers, wrappers and the like provided with rubber coating in piles with no risk of their sticking to each other. The coatings are for this purpose applied in such a manner that an uncoated border is left at least along the nearest free edge of the wrapper.

The same arrangement can also be used for other objects, which are not wrappers in the true sense of the word but belong to the same class, as for instance envelopes being made of paper, cardboard, cloth or the like, and provided or not provided with a printed or written message and intended to be folded and held together by the coatings applied within one or several of its edges. Examples of such sheets of paper are printed forms, circulars or notices of every kind. If these are provided at the edges with rubber coatings, the paper needs only to be folded once and the address be written on the outside. When opening the message the parts fastened together are torn or cut off. If one of the sides is left without coating, the printed message may be forwarded as third class mail matter. If it is desired to write the address on the same side as the message one of the paper halves can be provided with a so called envelope window or a cut out window.

The accompanying drawing illustrates a few embodiments of the invention. Fig. 1 shows an open envelope viewed from the rear, Figs. 2 and 3 a couple of other envelopes, and Fig. 4 a sheet of paper for a message.

As will be seen from Fig. 1 the closing means or flap 1 of the envelope is provided with a coating 3 along the free edges 2 where the gum is applied on common envelopes. The rear side of the

envelope has, however, also a similar angular, coating 4 which is so placed that, when the envelope is closed, the coatings 3 and 4 meet and stick together. These coatings are produced by means of an angular stamp, or a stamp composed of two angles, which has been brought into contact with a mass of suitable kind such as a rubber solution or the like, the solution then being impressed onto the flap and the rear side of the envelope. When the coating is applied, a narrow, free uncoated border 5 is left at the free outer edges of the flap. Likewise the adjacent ends 30, 40 of the coatings 3 and 4 respectively should preferably not meet, uncoated material having to be left between these end portions as well as between the end of coating and the outer edges of the envelope. Fig. 2 shows a pay bag of paper, provided in an analogous manner, with rubber coatings 3, 4 on the flap 1 and the rear side of the bag.

Fig. 3 illustrates an envelope which, from the point of view of manufacture, is more advantageous than the envelope according to Fig. 1 in as much as the envelope with its flap is devised in such a manner that the coatings may be applied by mechanical means in the form of straight bandlike stripes. The flap as well as the rear side of the envelope are provided with two coatings 3a, 3b and 4a, 4b respectively of this kind, the coatings being automatically applied by coating wheels during the successive feeding of the envelope through a coating machine. A narrow uncoated border 5 must also in this case be left at the free edge 2 of the cover. Experience shows that the stripes of coating reaching the cross edges of flap and envelope makes very little harm which is due to the fact that the stripes are rather narrow and that the flaps of adjacent envelopes do not come into contact with each other at this point as easily as they do along the longitudinal edge.

Fig. 4 shows a rectangular sheet of paper 6 intended to be used as a letter or circular, the printing and writing of which may be placed within the frame formed by the four stripes 7 of adhesive solution. The said frame leaves an uncoated space 8 all around the sheet. When mailed it can serve as wrapper or envelope for itself by folding it at the line 9. The address may be written on the back side or within the dotted frame 10, the dotted frame 11 in this case being cut out or oiled to constitute a "window" for the address.

As indicated above, a substance of such nature is used for the coatings that the latter immedi-

ately stick to each other when pressed against one another by the closing of the envelope. A substance of this kind is so called rubber solution, that is to say rubber solved in benzole or other suitable solvent which upon evaporation or partial evaporation leaves the rubber in such a state that it immediately sticks to another similar layer when brought into contact with it. Moreover, the rubber or caoutchouc also possesses a property which is very important for the purpose in question, that is to say the property of making the adhering between the coatings stronger than between the caoutchouc and the paper or cardboard. This involves the advantage that the envelope can not be opened and closed again without leaving evidence of the fact. Further the rubber is not dissoluble in water and consequently the envelope can not be opened by using steam.

Experience has also shown that a caoutchouc coating will not stick to other paper after it has dried. It is possible, therefore, to store envelopes, bags or the like prepared in accordance with the present invention in piles or bunches without disadvantage, because the rubber coating is disposed on one side only and because it is not extended to the longitudinal outer edges of the wrapper. Such storing, even if it be for a long time, does not have a detrimental influence on the mutual adhering capacity of the rubber coatings.

Through the arrangement above described, the envelopes are immediately ready for being closed, without the necessity of moistening the closure flaps or covers. In the sealing of large quantities of parcels, seed bags, pay bags and the like, this involves a considerable relief in the work, as will be readily understood.

I claim:—

1. A wrapper, comprising complementary portions to be adhered together, and an adhesive coated on said complementary portions and terminating just short of at least the longitudinal edge of that portion which is outermost on the wrapper, the adhesive being so disposed that the coating on one portion will overlie that on the other portion when the wrapper is in its sealed position, said adhesive being of such material that when the complementary portions are folded, the coatings will adhere together firmly, without moistening.

2. A wrapper, comprising complementary portions to be adhered together, and an adhesive comprising a solution of rubber in benzole

coated on said complementary portions and terminating just short of at least the longitudinal edge of that portion which is outermost on the wrapper, the adhesive being so disposed that the coating on one portion will overlie that on the other portion when the wrapper is in its sealed position.

3. A self-contained envelope comprising a sheet of paper adapted to carry a message thereon, and an adhesive solution coated along the edge of the paper and terminating just short thereof so as to provide an uncoated border, said adhesive consisting of material which when the sheet of paper is folded so that the adhesive on one complementary portion thereof overlies that of the other portion, the coatings will adhere together firmly, without moistening.

4. A self-contained envelope, comprising a sheet of paper adapted to carry a message thereon, and an adhesive consisting of a solution of rubber in benzole coated along the edge of the paper and terminating just short thereof so as to provide an uncoated border, the adhesive on one complementary portion, when the sheet of paper is folded into two complementary portions, overlying and adhering firmly, without moistening, to the coating on the other portion.

5. An envelope of substantially rectangular shape and with a flap disposed at the open end thereof, a coating of adhesive along the back edge of said flap and terminating just short of said edge so as to provide an uncoated border and formed of a material which, while it will not adhere to the paper of the envelope, will adhere firmly to a coating of similar material, without the necessity of moistening, and a coating of similar material so disposed on the back portion of said envelope that when the flap is folded into its closed position, the two coatings will overlie each other.

6. An envelope comprising a substantially rectangular body portion, and a flap attached thereto, an adhesive comprising a solution of rubber in benzole coated on the back of said flap adjacent to but just short of the outer edges thereof so as to provide an uncoated border portion, and a second coating of the same material so disposed on the rear of the body portion that when the flap is folded into its closed position, the two coatings will be juxtaposed and will adhere firmly to each other without moistening.

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