

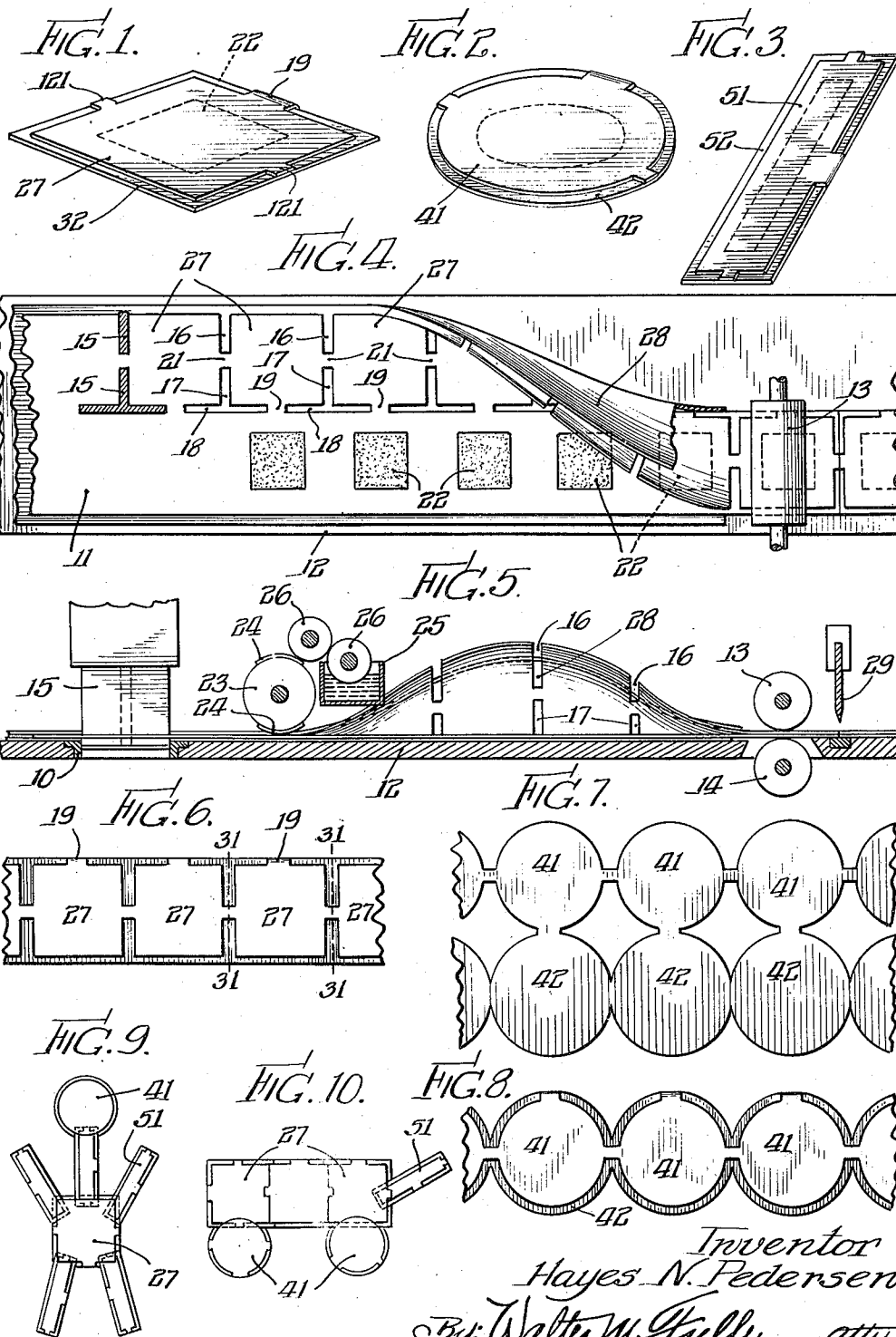
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H. N. PEDERSEN

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MANUFACTURE OF TOY CARDS

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MANUFACTURE OF TOY CARDS

Hayes N. Pedersen, Racine, Wis.

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2 Claims. (Cl. 93—1)

The current invention concerns certain betterments and advantages in the production of toy-cards, such as may be combined together in various relations to provide different designs or configurations, the cards being especially devised for use by children whereby to amuse and interest them and to develop their creative propensities.

One aim of the present invention is to provide a procedure whereby to supply a type of double or duplex cards having the stated capabilities or capacities and which may be manufactured on a commercial scale at relatively small expense.

A further object of the invention is to afford a method of making such style of cards that they may be manipulated and used by a child with ease and facility, and of such varying shapes and colors as will attract the attention of a child and keep him pleased and interested in developing new arrangements or associations of the cards temporarily secured together in groups.

Ordinarily, these cards are made of different shapes and colors so as to provide a set permitting selective engagement of such cards with one another thus allowing them to be impermanently associated together for the purpose of establishing designs of pleasing and entertaining character, which depicments and patterns may be readily modified and changed by rearrangements of the cards.

To enable those acquainted with this art to understand the invention more fully, the method of making two shapes of such cards has been illustrated in the accompanying drawing forming a part of this specification and to which reference should be had in connection with the following detailed description, and, in this drawing, for simplicity, like reference numerals have been used to designate the same parts of the device used for the practice of the new process.

In such drawing—

Figures 1, 2 and 3 portray three different shapes of the duplex-cards made by the new procedure;

Figure 4 illustrates in plan the several steps in the production of such double-cards from a long strip or ribbon of pasteboard or equivalent material;

Figure 5 depicts the device in elevation;

Figure 6 shows in plan the duplex-cards before they have been cut apart;

Figures 7 and 8 present blanks for the making of round duplex-cards; and

Figures 9 and 10 show designs which can be made by combining the cards of different

shapes in various manners, Figure 9 presenting the cards grouped to picture a man or boy and Figure 10 showing a cart or wagon.

To produce the new double-cards of the rectangular or square style presented in Figure 1, the following procedure is carried out.

A long supply strip or ribbon 11 of pasteboard, or its equivalent, is fed along on a table 12 intermittently at a suitable speed by combined, power-rotated, feed and pressure rollers 13, 14, and, during recurrent periods of rest in such travel of the supply-strip, a reciprocatory-punch 15 and companion stationary-die 16 provides in the strip T-shaped apertures 17 and smaller, straight perforations 16 of the shape and arrangement clearly depicted in Figure 4, the aligned lengthwise parts 18 of the apertures 17 leaving narrow, intervening bands 19 between them, and the aligned transverse parts of the companion apertures 17 and 16 allowing intervening links or ties 21.

During travel of the pasteboard strip or ribbon a row of longitudinally spaced-apart rectangular areas are coated with a suitable adhesive 22 on either side of the openings 18 by means of a power-operated rotary-brush or the like 23 receiving adhesive on its raised surfaces 24, 24 from that in a supply-receptacle 25 by means of intermediate feed-rollers 26, 26, all as will be readily understood.

Each of these adhesive-coated districts is in transverse register with the adjacent card 27 defined by the four apertures and corresponding edge of the ribbon or strip, such card constituting the upper or front card of the duplex-card undergoing production, the adhesive-coated area being less in size than such part 27.

Further along in its travel, approximately one-half of the width of the slotted, adhesive-coated, pasteboard-ribbon encounters an appropriately bent portion 28 of a sheet-metal guide or folder which turns over such longitudinal part of the sheet sidewise along one margin of its lengthwise-registered slot-sections 18, 18 and down onto the top surface of the remainder of the strip to which it becomes adhered at the coated areas only, and as the strip moves along, rollers 13, 14, by which it is thus advanced, press the adhesive coated parts together assuring their effective union, thus providing a double-thickness strip, a section of which is shown in plan in Figure 6.

During the intermission in the travel of the strip while the punch 15 is operating, a reciprocatory cutter 29, operated by any suitable mechanism not necessary to illustrate, descends and severs the double-thickness strip into indi-

vidual double-thickness or duplex-cards along the transverse lines 31—31 through the middle of the length of each link 21, these links having previously been provided for the purpose of properly maintaining the front or upper cards 27 in proper relation to the other unperforated longitudinal section of the strip, the completed duplex-card being shown in Figure 1, wherein the larger underlying or back card has been characterized 32 and also wherein the halves of the whole links 21 have been designated 121.

It is to be noted that in this double card of Figure 1 only the center portions of the two cards forming it are adhered together, leaving the margins free except for the band 19 and this allows other cards to be associated with the one illustrated by introducing portions of their margins between the two cards constituting this duplex-card.

In making round duplex-cards with upper and lower cards adhered together, the pasteboard supply-strip is punched to cut out parts as shown in Figure 7 wherein the smaller, front card is characterized 41 and the companion larger lower card is designated 42, the manner of manufacturing such cards being readily understood from the foregoing description with respect to the square or rectangular cards.

A double-card of different dimensions and shape is shown in Figure 3 wherein the top card is designated 51 and the bottom card 52.

These cards may be temporarily interlocked or joined together to provide different designs or figures such, for example, as shown in Figures 9 and 10 wherein Figure 9 represents a boy or man and Figure 10 a wagon, and it is to be remembered that these associated cards are readily disassociated to be used in the production of other shapes and figures.

The process herein disclosed is not necessarily limited to the precise and exact details presented and various modifications may be resorted to without departure from the heart and essence of the invention and without the loss or sacrifice of any of its substantial benefits and advantages.

I claim:

1. In the process of making toy duplex-cards,

the following novel combination of steps, advancing strip-means of card material, including a continuous longitudinal series of back card-sections directly connected together crosswise and a lengthwise series of smaller front cards spaced apart longitudinally and connected together by a link between each pair of successive cards of the series and narrower than the width of such front cards, successively bringing such front cards into registered overlying relation with their corresponding back card-sections, successively securing said front-cards and back card-sections flat together within the borders of the smaller front cards, and successively severing the strip of duplex-cards into individual flat toy marginally-interfittable duplex-cards on transverse lines intermediate the length of each such link.

2. In the process of making toy duplex-cards, the following novel combination of steps, successively punching a supply-strip of card-material to provide such strip along one longitudinal zone with a continuous lengthwise series of back card-sections directly connected together crosswise and a lengthwise series of smaller front-cards spaced apart longitudinally of the strip and in transverse registration with their corresponding back card-sections and connected together lengthwise the supply strip by a link between each pair of successive cards of the series and narrower than the width of such front-cards, each such front-card being spaced laterally from its corresponding back-card section and connected thereto by a band of less width than the dimension of the front-card lengthwise the strip, feeding said strip forwardly, successively applying adhesive to areas of said strip, each area being less than that of a front-card and located to adhere together the corresponding front-cards and back-card sections when folded into contact with one another, folding said strip progressively along said bands to bring said front-cards and back-card sections into adhered registered contact with one another, and successively severing the completed duplex-cards from the strip across the middle points of said links.

HAYES N. PEDERSEN.