May 17, 1938. E. BRAVI 2,117,281

MANUFACTURE OF MATCH BOOKS

Filed Aug. 9, 1935

Fig. 1

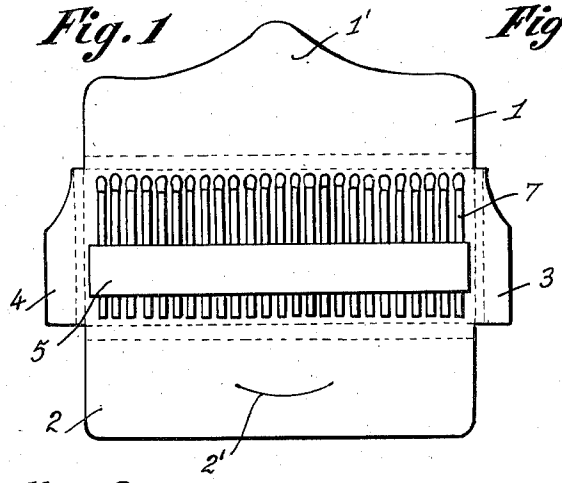


Fig. 2

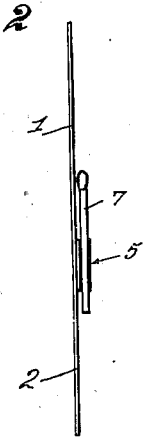


Fig. 3

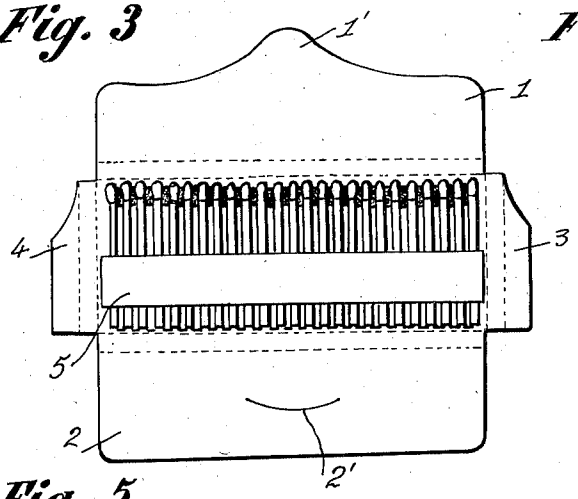


Fig. 4

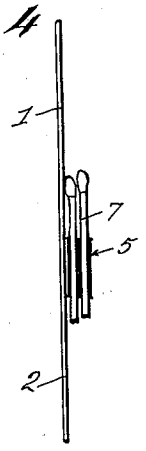


Fig. 5

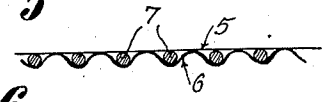


Fig. 6

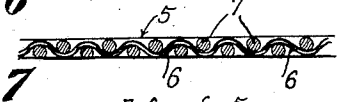
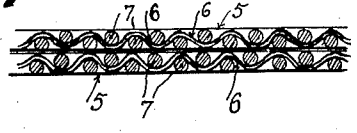


Fig. 7



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MANUFACTURE OF MATCH BOOKS

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Application August 9, 1935, Serial No. 35,448
In Italy November 19, 1934

2 Claims. (Cl. 93—2)

This invention relates to mechanical production of matches in book-cases and has for its object to dispose the matches in said book-cases, having any form and dimension whatsoever, in one or more layers and in a determined number, a seat being provided for each match, wherefrom the match can be removed.

One of the more considerable advantages attained by the improvements according to the invention consists in that the disposition of the matches in said book-cases is effected ordinately and speedily, the number of the matches being at the same time exactly controlled.

Further, said disposition can be effected in book-cases having a slight thickness and being therefore not cumbersome.

The matches are mechanically disposed between two paper-bands, one of which is gummed. Afterwards, the two bands are fixed or glued at the points interposed between the matches. The layers of the matches fixed between the paper-bands are afterwards cut in the desired lengths and disposed one upon another, in order to obtain the desired groups, for example of 10, 20, 40, 50 matches. These groups are then put into book-cases of any form and dimension whatsoever.

The annexed drawing merely by way of example, illustrates the process and the disposition for the production of matches according to the invention, and precisely:

Figs. 1 and 3 show a book-case in opened position, wherein the matches are disposed respectively in one and two layers, said matches being fixed between two paper-bands.

Figs. 2 and 4 are respectively sections of Figs. 1 and 3.

Fig. 5 shows in cross-section the disposition of the matches in one simple layer between the paper band and the gummed counter-band, as it comes from the machine.

Fig. 6 shows also in cross-section the assembly of two bands and counter-bands, the matches being placed in their seats, one on another, so that the matches are disposed in two series arranged in the same line.

Fig. 7 shows also in cross-section two bands containing the matches, placed upon one another.

As shown in the drawing, (Fig. 5) the arrangement consists of one paper band 5 and of one counter-band 6, which is gummed, between which the matches are disposed mechanically, the latter being maintained at their places, for the reason, that the counter-band 6 is fixed to the band 5 at the points interposed between said matches 7, by means of known machines, so that a series of sinuosities are formed on the counter-band 6, wherein the matches are disposed. The band containing the matches so formed is then cut in the desired lengths and these bands with the matches are afterwards introduced singly, or one upon the other, into book-cases having any desired form and dimension whatsoever, and securing the band 5 by gluing strip 6 to the back of the book-case 1, the lateral parts of which 3 and 4, and front parts or flaps 1 and 2, are, in a known manner, folded for the closing of the book-case. For said closing, further, a part such as a tab 1' can be provided on the upper side 1, and a corresponding slit 2' on the lower side, the tab 1' being destined to be introduced into said slit 2'. The tab 1' and the slit 2' can also be omitted and, in such a case, the form of the book-case, could be that for example shown in dotted line in the upper portions of Figs. 1 and 3.

What I claim and desire to secure by Letters Patent of the United States is:

1. The method of manufacturing a match book or package in a combined group of steps, which consists in continuously arranging match stems in spaced apart relation on a paper strip, superposing a second, gummed paper strip upon said stems and first paper strip, securing the second strip to the first strip between the match stems by corrugating said second strip in situ to form a match strip, superposing upon and mutually securing two match strips thus formed to each other, so that the corrugations of one match strip project between the corrugations of the other match strip to form a double match strip, disposing and securing a portion of the resulting double match strip thus formed upon a cover having flaps, and finally folding the flaps and completing the book.

2. The method of manufacturing a match book or package in a combined group of steps, which consists in continuously arranging match stems in spaced apart relation on a paper strip, superposing a second, gummed paper strip upon said stems and first paper strip securing the second strip to the first strip between the match stems by corrugating said second strip in situ to form a match strip, superposing upon and mutually securing two match strips thus formed to each other, so that the corrugations of one match strip project between the corrugations and matches of the other match strip to form a double match strip, disposing and securing a portion of the resulting double match strip thus formed upon a cover having flaps, and finally folding the flaps and completing the book.

EUGENIO BRAVI.