DEVICE FOR THE MANUFACTURE OF IMPRINTED MATCHES

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DEVICE FOR THE MANUFACTURE OF IMPRINTED MATCHES

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This invention relates to a device for the manufacture of imprinted matches.

The match made by the device of this invention differs from the matches known up till now in that it is provided at least on one side with an imprint, an advertising text or other symbols. This offers the possibility of advertising not only on the box in which the matches have been packed but also on the matches themselves.

According to the invention the imprint on the match splints may be done both during and prior to the cutting of the match splints from a piece of thin material and no difficulties are encountered when said match splints are imprinted either on one side or on two opposite sides.

The invention will be further explained below with reference to the accompanying drawings showing diagrammatically by way of example some embodiments of the device according to the invention.

FIG. 1 shows a side view of the imprinted match.

FIG. 2 shows part of a cutting device comprising a printing device which during the cutting operation imprints the match splints on one side.

FIG. 3 shows part of a cutting device comprising a printing device which during the cutting operation imprints the match splints on two opposite sides.

The match shown in FIG. 1 consists of a match splint 1 and a head 2. The match splint 1 is provided on its front side or face with an imprint 3. If desired an imprint may be provided also on the opposite side of the match splint.

The printing device shown in FIG. 2 comprises a rotating counterroller 4 composed of rings or discs 5 of wear resistant material, such as for example nylon (super-polyamides) or terylene (polymers of terephthalic acid) between which rings or discs 6 are arranged which are provided with printing types such as letters, figures or like symbols by means of which the required imprint or text may be applied on the match splints 1. The device comprises an inking roller 7 which may be constructed in a manner known per se.

The rings or discs 5 of wear resistant material cooperate with a cutting roller composed of cutting knives 8 and distance rings 9 mounted on a rotating shaft 10. Strips of material are supplied to said cutting roller and are subdivided by the knives into match splints. During the cutting operation the counterroller 4 and the cutting roller are positively driven so that the match splints 1 are imprinted simultaneously with the cutting thereof. A stripping device extends between the knives 8 and for simplicity's sake only the times 11 of said stripping device are shown.

FIG. 3 shows part of a device in which the match splints are imprinted on both sides. The counter roller 4 and the inking roller 7 are constructed in the same way as in FIG. 2 so that these need not be further described.

Just as in the case of the cutting roller according to FIG. 2 the cutting roller comprises parallel spaced knives 8 which subdivide the pieces of material into match splints are imprinted on both sides. The counterrotating cutting roller there is arranged a disc 12 provided with printing types, figures, etc., two narrow distance rings 13 being mounted therein between. An inking roller 14 having recesses for the cutting knives 8 provides for the inking of the discs 12. In this figure the stripping device for the matches is not shown.

I claim:

1. A device for the manufacture of imprinted matches comprising a rotatable cutting means including a series of rotatable, laterally spaced apart parallel cutting knives, printing means arranged in confronting relation to the cutting means with material in strip form being passed between the cutting means and the printing means, said printing means including printing types laterally spaced apart in parallel relationship and interposed between the cutting knives so as to imprint the material and simultaneously support the material during the cutting of the material into individual splints and an inking means disposed adjacent the printing means for engagement with the printing types.

2. A device for the manufacture of imprinted matches comprising a first rotatable shaft, cutting means mounted thereon and including a plurality of circular cutting knives circumposed on the shaft, spacing means circumposed on the shaft and interposed between the knives to space the knives laterally apart, a second rotatory shaft arranged parallel to the first shaft, a printing device mounted thereon and including a plurality of printing types arranged on the shaft and spaced apart laterally, the printing types being interposed between the cutting knives so as to imprint material passed between the cutting device and the printing means while simultaneously supporting the material against the spacing means as the knives cut the material into separate splints, and an inking means disposed adjacent the printing means for engagement with the printing types.

3. A device for the manufacture of imprinted matches comprising a first rotatable shaft, a cutting means mounted thereon and including a plurality of circular cutting knives circumposed on the shaft, spacing rings circumposed on the shaft and interposed between the knives in contiguous relationship therewith to space the knives laterally apart in parallel relationship, a second shaft arranged parallel to the first shaft, a printing device mounted thereon and including a plurality of parallel printing types arranged on the shaft and spaced apart laterally, the printing types being interposed between the cutting knives so as to imprint material passed between the cutting device and the printing means while simultaneously supporting the material against the spacing rings as the knives cut the material into separate splints, and an inking means disposed adjacent the printing means for engagement with the printing types, said spacing rings having printing types disposed thereon for imprinting the opposite sides of the material at the same time that the cutting knives operate to cut the material into separate splints and a further inking means disposed adjacent the cutting means for engagement with the printing types on the spacing rings.

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