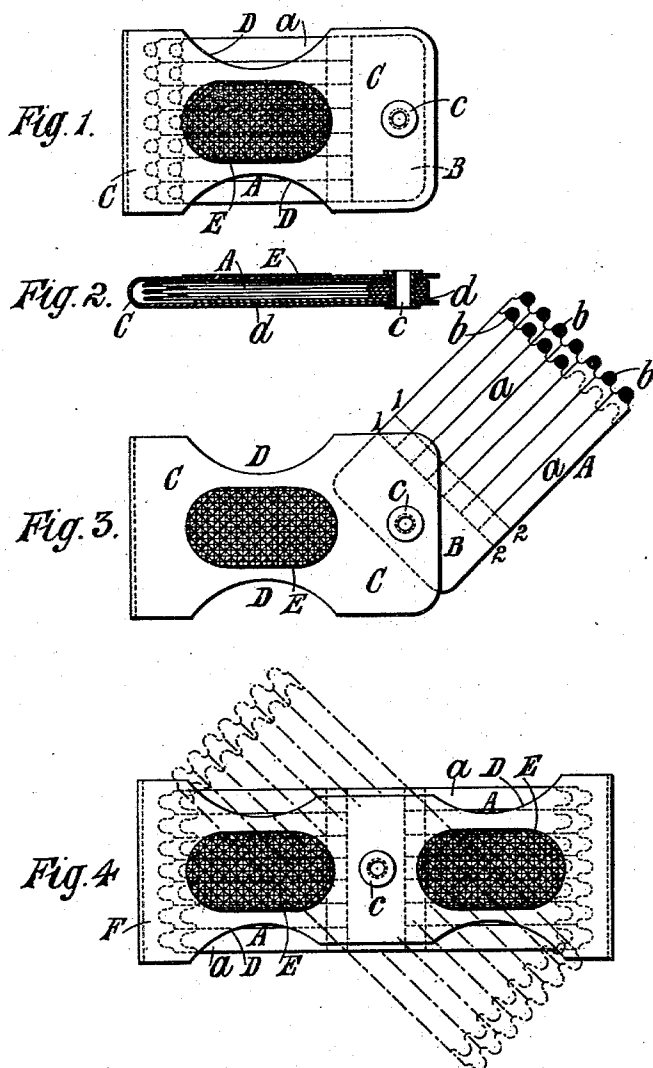


(No Model.)

H. J. KÖSTER.
MATCH CASE.

No. 548,559.

Patented Oct. 22, 1895.



Witnesses:
Jas. A. Green
Robert Everett.

Inventor:
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UNITED STATES PATENT OFFICE.

HERMANN JOHANN KÖSTER, OF SCHIEDAM, NETHERLANDS, ASSIGNOR OF
ONE-HALF TO WILLEM BEUKERS, OF SAME PLACE.

MATCH-CASE.

SPECIFICATION forming part of Letters Patent No. 548,559, dated October 22, 1895.

Application filed May 25, 1895. Serial No. 550,712. (No model.)

To all whom it may concern:

Be it known that I, HERMANN JOHANN KÖSTER, manufacturer, of Schiedam, Holland, in the Kingdom of the Netherlands, have invented new and useful Improvements in Match-Cases, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figures 1 and 2 show a finished match-case in plan and transverse section, respectively. Fig. 3 shows the said match-case in plan with the bundle of matches turned outward, the splints or sticks of the matches in this case being provided with heads or tips of inflammable composition at one end only. Fig. 4 shows a match-case in which the splints or sticks are provided with heads or tips of inflammable composition at both ends.

My invention relates to match-cases in which flat matches made with tooth-shaped heads for receiving the ignition composition or tipping-paste are attached together in sheets or leaves, which are arranged one over another in layers and so secured in the case that when required for use they may be turned or moved out of the said case so as to permit one or more matches to be torn off or detached as required.

The matches are flat and tooth-shaped at one or both ends. The tooth shape as well as the flat arrangement of the matches presents considerable advantages over the known four-sided Swedish matches, since on that account the matches can be made from all kinds of wood, even the commonest. The leaves or sheets of match-splints can be planed from blocks of wood and not cut or split off, as is necessary in the manufacture of the well-known Swedish matches from poplar wood. The matches can also be made from wood board or paper, this material being, moreover, cheaper than poplar wood.

The tooth at the end is provided with tipping-paste, and by reason of its shape only very little of this material is required as compared with the Swedish matches, since the flame sets fire to the wood or paper at the corners of the tooth much more easily. Moreover, seeing that the heads or tips are only very little thicker than the splints or sticks, the leaves or layers can be fastened together

without the ends being too thick. Further, the splints or sticks of one sheet are shorter than those of the succeeding one, so that the heads of the matches on two adjacent leaves do not lie one on top of another and make the packet too thick. Packed in this manner the packets are not only very thin and convenient to carry in the pocket, but in this way the head or tip of inflammable composition of a match cannot accidentally come into contact with the igniting or rubbing surface. The matches also cannot be lost.

The matches can, like all other matches, be paraffined, impregnated, or otherwise treated to prevent them from glowing after extinction.

The matches are attached together, as above mentioned, in leaves or sheets, and are provided at one or both ends with tooth-shaped heads or tips, and when they have tips at both ends they are made correspondingly longer.

Referring to the drawings, the splints or sticks *a* are cut out of the leaf or sheet *A* with tooth-shaped heads *b* and are all attached to a common base or foundation *B* of the leaf or sheet, which is here slightly incised, (see the dotted lines *1 2* in Fig. 3,) so as to facilitate the tearing or breaking off of the matches.

Several leaves *A* are laid one on another, the matches *a* of the second, fourth, sixth, &c., leaves being shorter than those of the first, third, fifth, &c., leaves, so that, as above mentioned, the inflammable heads or tips of the matches in two adjacent leaves or sheets do not come into contact with one another and thus make the packet too thick at the end or ends.

The bundle of matches made as above described is laid on a somewhat stronger piece *d* of paper or other suitable material and then placed therewith in a cover or case *C* of strong paper or other suitable material, so that the heads or tips of the matches lie in the bend of the cover, while the base or foundation piece *B* is pivotally attached to the cover or case by an eyelet or rivet *c* in such a manner that the bundle of matches may be turned or moved outwardly from the case *C*, as shown in Fig. 3, to permit the tearing off or detachment of the match.

The two sides or walls of the cover or case are formed with semicircular openings *D D*,

so as to enable the bundle of matches to be conveniently grasped to turn or move the same outward.

5 The igniting or rubbing surface E is provided on the outside of the case, so that any contact therewith of the inflammable heads or tips *b* is prevented.

10 In Fig. 4 the leaves A of the bundle of matches are shown cut into splints or sticks at both ends. Here, again, the length of the splints or sticks in one leaf is less than that of those in the next leaf. In the middle between the match splints or sticks a part is left free, serving for fastening the leaves to
15 one another.

The bundle of matches made in this way is pivotally fastened in the middle point of the case F by means of the eyelet or rivet *c*. The case is closed at its ends and is provided with
20 openings D in its longer sides and with igniting or rubbing surfaces E, as shown.

As may be seen, by reason of its small thickness the bundle of matches and the case containing them, made as above described, can be
25 conveniently carried in the pocket.

The weight as well as the girth is smaller than that of the boxes of Swedish matches as usually sold, while the cost of manufacture, as already mentioned, is less.

30 What I claim is—

1. A match-case containing flat matches at-

tached together in leaves or sheets which are laid one upon another in layers with the inflammable heads or tips in either leaf or sheet out of contact with those in the next adjacent leaf or sheet and are pivotally mounted in a cover or case which is open at the sides, substantially as hereinbefore described.

2. The combination, with a cover or case, of leaves or sheets of flat matches arranged one upon another in said cover or case, the matches in alternate leaves or sheets being of greater length than those in the other leaves or sheets, substantially as and for the purpose described.

3. The combination, with a cover or case, of leaves or sheets having flat matches at both ends thereof, which leaves or sheets are arranged one above another in said cover or case and are pivotally connected thereto at the middle thereof, substantially as described.

4. The combination of the cover or case provided with the ignition or rubbing surface E, the leaves or sheets A formed with the matches *a* and pivotally secured in said cover or case by means of an eyelet or rivet *c*, substantially as, and for the purposes, set forth.

HERMANN JOHANN KÖSTER.

Witnesses:

AIRE HARRY VOORWINDEN,
HERMAN A. REQUE.