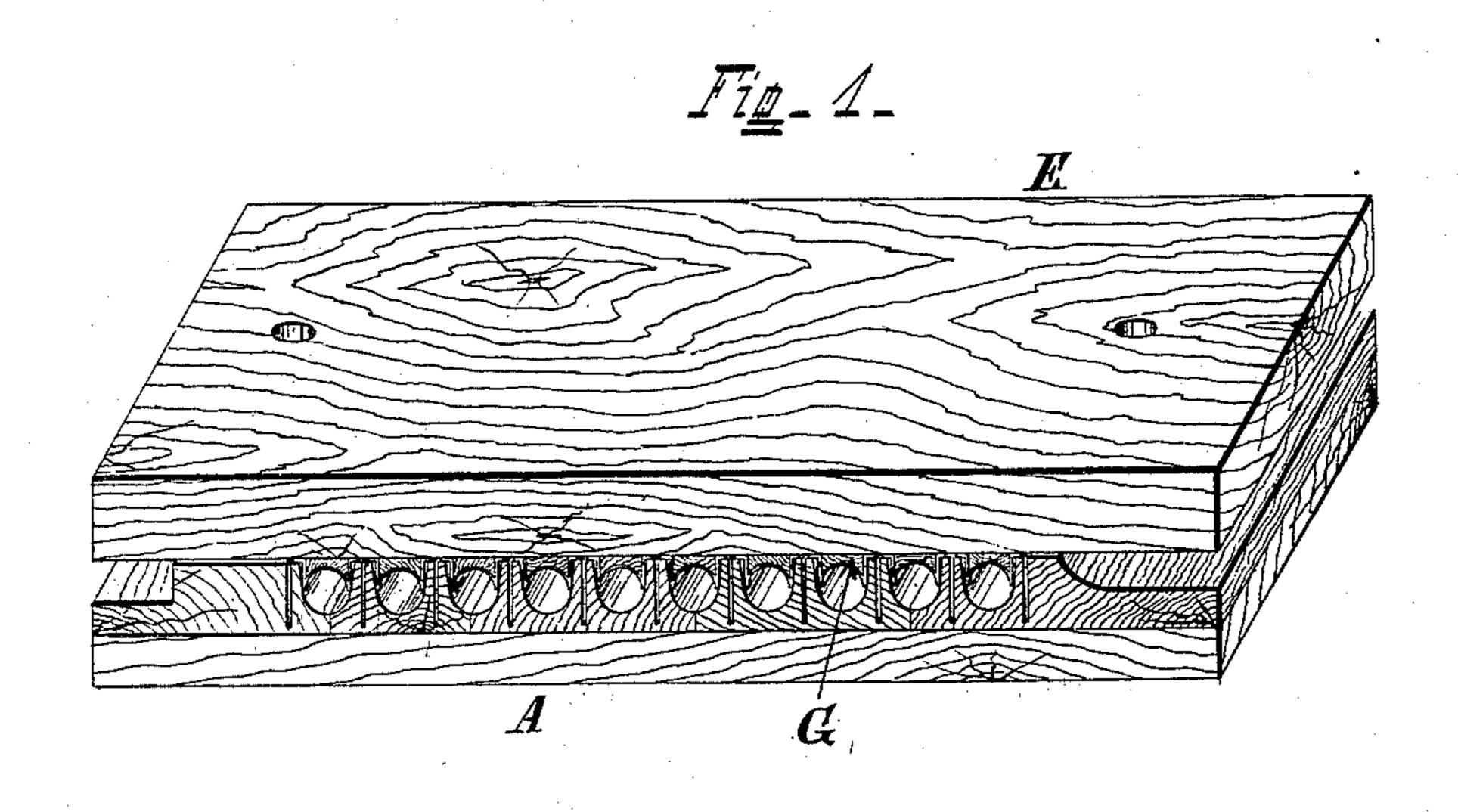
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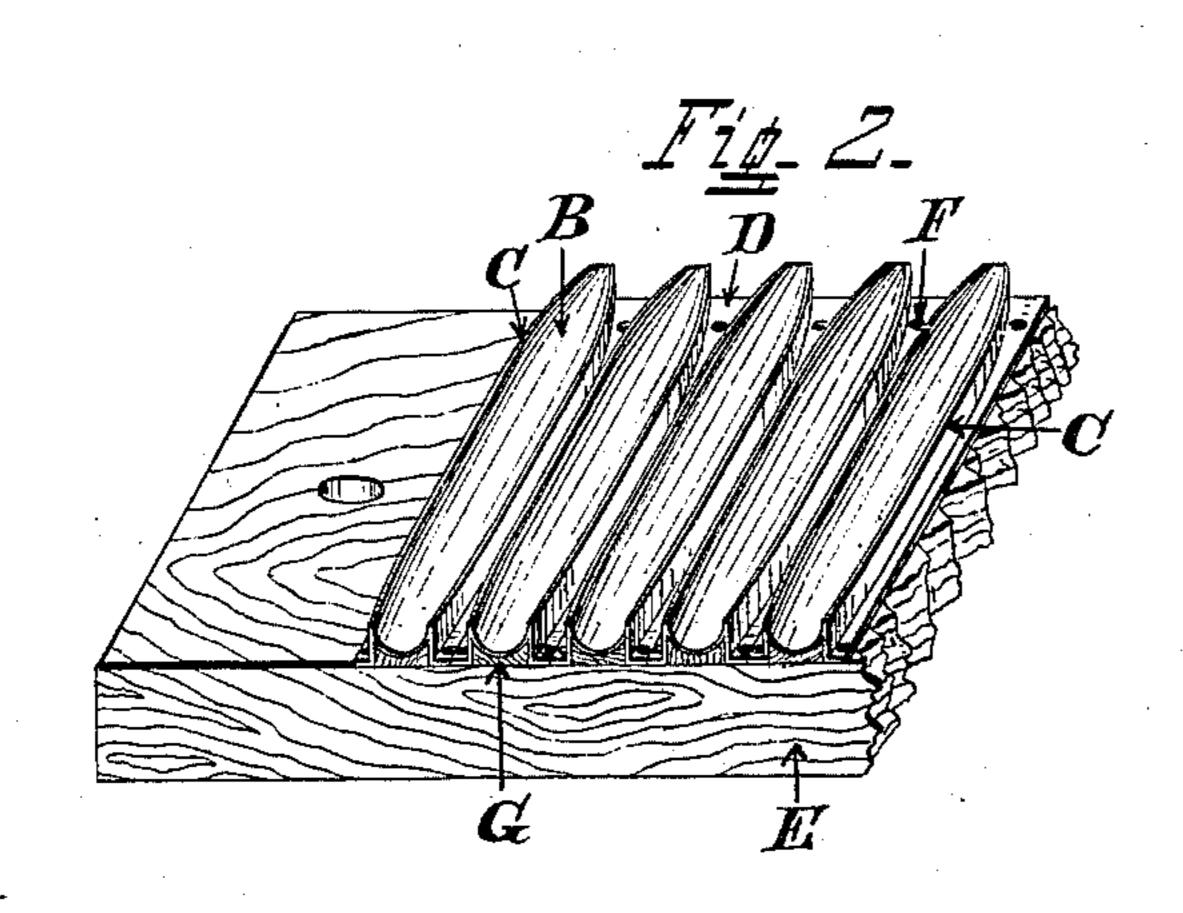
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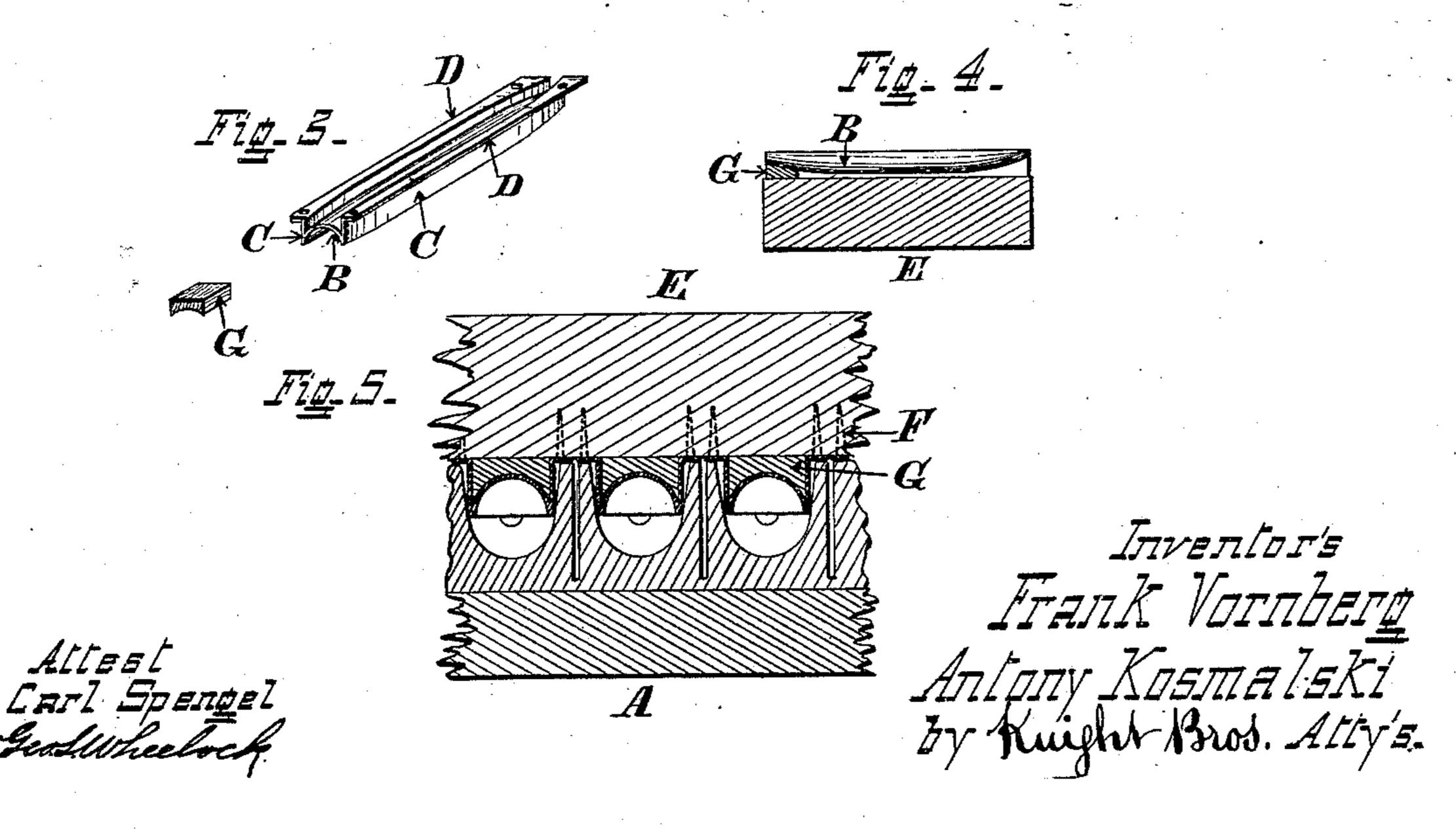
CIGAR MOLD.

No. 302,177.

Patented July 15, 1884.







United States Patent Office.

FRANK VORNBERG AND ANTONY KOSMALSKI, OF CINCINNATI, OHIO.

CIGAR-MOLD.

SPECIFICATION forming part of Letters Patent No. 302,177, dated July 15, 1884.

Application filed October 2, 1883. (Model.)

To all whom it may concern:

Be it known that we, FRANK VORNBERG and Antony Kosmalski, both of Cincinnati, Hamilton county, Ohio, have jointly invented a new and useful Improvement in Cigar-Molds, of which the following is a specification.

Our invention is an improvement in the class of cigar-molds the mold-surface of whose "cups" or "plungers" is composed of sheet to metal, the construction of our improved plunger being such as to avoid deformation of the mold-surface by driving of nails or other fastening devices through the same, and such as to secure several other important advantages, 15 hereinafter explained.

In the accompanying drawings, Figure 1 is a perspective view of a cigar-mold embodying our invention, said mold being shown in its closed condition. Fig. 2 represents a portion 20 of a plunger part inverted. Fig. 3 shows a plunger and a plug detached. Fig. 4 is a vertical section on the mid-line of a plunger. Fig. 5 is a fragmentary transverse section.

A may represent any suitable matrix por-25 tion of a cigar-mold, the said matrix portion being composed, preferably, of wood, as shown.

Our cups or plungers are each formed of a single piece of "tin-plate" or other sheet metal, which (by means of suitable dies) is 30 made to assume the shape indicated in the drawings, in which the middle portion of the piece is given the trough-like form B, corresponding to a longitudinal half of a cigar, and constitutes the matrix proper, and in which 35 the immediately adjoining parts are bent vertically or nearly vertically backward, as at C C, and thence horizontally outward, as at D. The portions D.D. constitute flanges, by which the plungers are fastened to the back 40 board, E, by means of nails or tacks F.

In the most complete form of our mold, a short wooden plug, G, having been dipped in any suitable cement, is inserted in the interstice between the butt-end of the matrix and 45 the back board.

Over customary cigar-molds possessing metal-lined plungers our invention has several obvious advantages. For example, the mold-surface is wholly free from defacement

due to protruding nail-heads, as well as from 50 the frequent objectionable denting or bruising from "mislicks" made in the act of driving the nails—a work performed chiefly by boys. We avoid the expense and labor of complete wooden "bodies," with the costly machines 55 employed in their fabrication, and we further avoid the contortion of the mold-surface incident to the shrinking and swelling of such bodies under changing hygrometric conditions. We also avoid destruction of the wood- 60 en matrix-surface by the customary ragged edge of a metal-lined plunger. In association with a wooden matrix part, as preferred by us, such metal plungers are easily pressed into and withdrawn from their matrices, there be- 65 ing much less friction than occurs either with the customary ragged-edged metal plunger. and greatly less than occurs in the use of molds in which both parts are of the same material.

The construction and material of the plun- 70 gers secures an elasticity which enables them to snugly fill their matrices without binding so tightly therein as to prevent proper closure of the plunger and matrix portions upon the filling, or so as to make their subsequent sepa-75 ration difficult. The objectionable dependence on glue for attachment of the cups to the

backing is avoided.

So far as known, our device is the only form of cups or plungers for cigar-molds which com- 80 bines the essential features of such a mold, in which each cup is stamped complete with its sustaining - walls and fastening - flanges (of which those of each plunger are independently nailed to the backing) from a single piece 85 of sheet metal, in which said walls are vertical to the mold-parting, and terminate not in cut edges, but in the sheet-surface bent to the proper feather-edges, and are sustained by plugs at the butt-ends, in the manner ex- 90 plained.

We claim as new and of our invention— In combination with a suitable matrix part of a cigar-mold, a plunger part consisting of a series of sheet-metal plunger-cups, each so 95 formed of a single piece of sheet metal as to present a half-mold trough, B, flanked by vertical or nearly vertical supports C C, having

outturned horizontal flanges D D for the nails or tacks F, by which the cup is attached to the back board, said cups being supported at their butt-ends by short wooden plugs G, and their advancing feather-edges being formed by the sharply bent or folded sheet, as and for the purpose set forth.

In testimony of which invention we hereunto set our hands.

> FRANK VORNBERG. ANTONY KOSMALSKI.

Attest:

GEO. H. KNIGHT, WM. H. POPE.