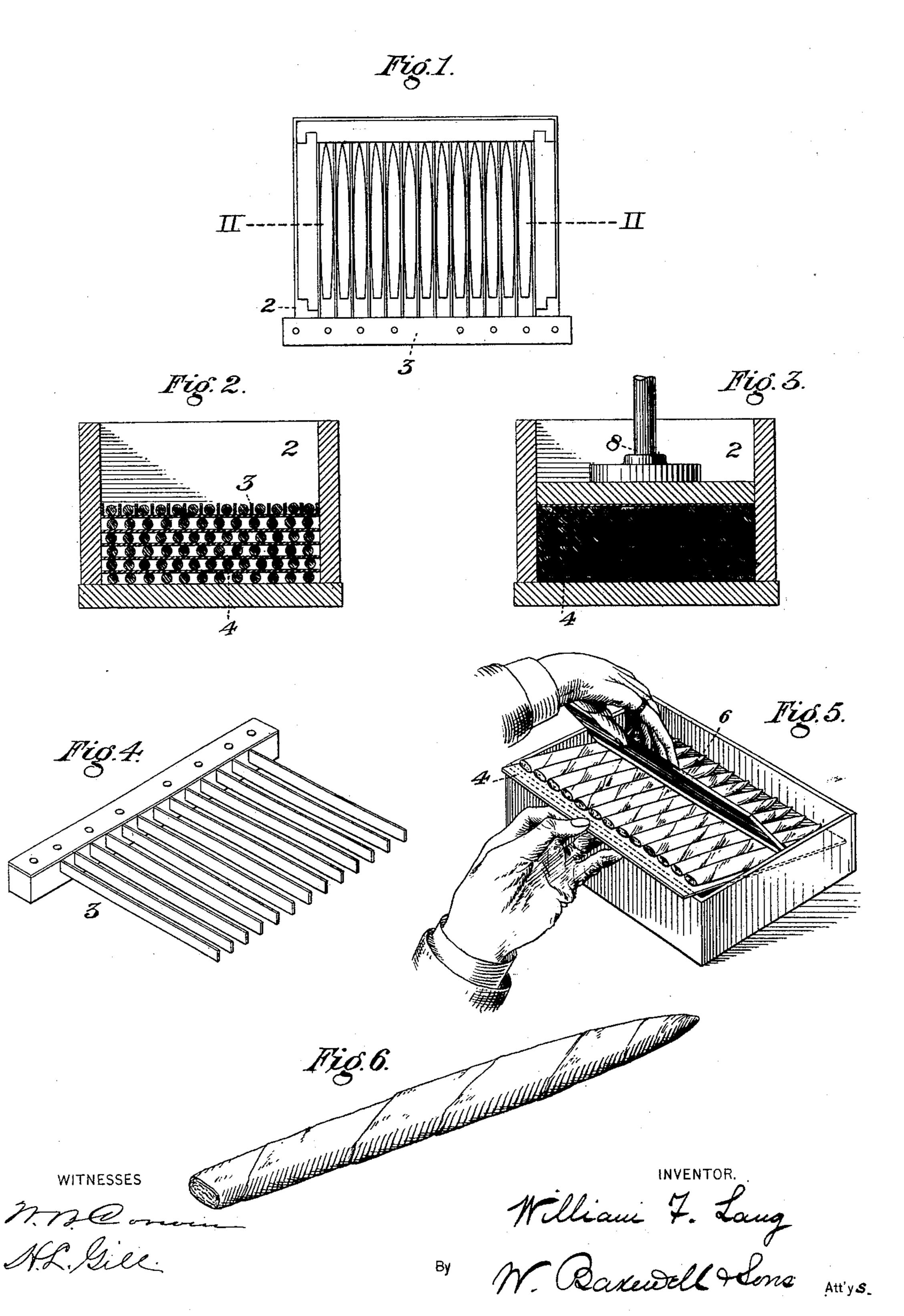
(No Model.)

W. F. LANG. ART OF PACKING CIGARS.

No. 410,553.

Patented Sept. 3, 1889.



United States Patent Office.

WILLIAM F. LANG, OF ALLEGHENY, ASSIGNOR TO THE UNION AMERICAN CIGAR COMPANY, (LIMITED,) OF PITTSBURG, PENNSYLVANIA.

ART OF PACKING CIGARS.

SPECIFICATION forming part of Letters Patent No. 410,553, dated September 3, 1889.

Application filed February 13, 1889. Serial No. 299,698. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. LANG, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new 5 and useful Improvement in the Art of Packing Cigars, of which the following is a full, clear, and exact description.

My invention relates to an improvement in packing cigars for sale and use, and simulto taneously flattening the eigars to alter their

shape.

The object of the invention is to reduce the cigars to a shape angular, preferably rectangular, in cross-section, and to pack them in 15 layers in the box, so that the cigars of each layer shall be uniform in shape and in compactness.

The invention is illustrated in the accom-

panying drawings, in which—

Figure 1 is a plan view of the box or case in which the cigars are placed preparatory to compressing them. This figure shows also the spacing device, by which the cigars are individually separated from each other in the 25 proper manner. Fig. 2 is a vertical cross-section on the line II II of Fig. 1. Fig. 3 is a similar section of said box or case, shown in connection with the plunger of a press for compressing the cigars. Fig. 4 is a perspect-30 ive view of the spacing device. Fig. 5 is a perspective view showing the manner of transferring the cigars into the cigar-box in which they are packed for sale. Fig. 6 is a perspective view of a finished eigar.

Like symbols of reference indicate like

parts in each.

The box or case 2, in which the cigars are placed preparatory to packing them, is made of the same width as the packing-box. In 40 the practice of my invention I take the cigars after they have been rolled, while they are yet in a somewhat moist and pliable condition, and place them in order in the box 2, there being placed in the box in a single layer 45 nearly as many as a single layer of the cigarbox will hold. In order that the cigars may be spaced uniformly in the box, I prefer to employ a spacing device 3, which is a combshaped instrument having a series of parallel 50 rods or teeth projecting from a body-piece or

the case 2, the cigars are placed between the spacing-rods, and a board or plate 4 is then placed on the cigars within the box, as shown in Fig. 2. On applying a slight pressure to 55 this board or plate, the spacer may be withdrawn without disturbing the positions of the cigars, which remain uniformly spaced or separated. Another layer of cigars is then placed upon the board or plate and properly 60 spaced. A second board is then set in place, and thus in succession a number of layers of cigars and boards may be placed in the case, the layers being preferably composed of alternately odd and even numbers of cigars, so 65 that they shall pack evenly in the box; though this is not essential, and the layers may be all odd or all even, if desired. To secure this alternate arrangement I employ two spacers, one adapted to use in arranging an even num- 70 ber and the other for an odd number of cigars. When a proper number of layers of cigars have been thus arranged in the case 2, I put this case in a press 8 and apply the pressure thereof to the board covering the top layer of 75 cigars. The effect of this is to compress all the layers, and to reduce the cigars from their natural cylindrical form to flattened shape, the precise shape being determined by the extent or degree of the compression, and as 80 the cigars are separated during compression by equal spaces all will be compressed or flattened uniformly. In order to compress the cigars to a thickness corresponding to the depth of the cigar-box in which they are to be 85 packed for sale, I place a mark on the box 2, at a distance above the bottom equal to the depth of the cigar-box plus the thickness of the boards or plates 4. If the cigars are pressed down to this mark, they will just fill the cigar-box 90 when placed therein. I now remove the case containing the cigars from the press, and taking the layers of cigars in succession on the plates on which they rest, and having placed the edge of the plate in the packing-box so 95 that the flattened cigars shall be directly above the position which it is intended they shall occupy therein, I lay on the cigars a rod or bar 6, having a facing of plush-cloth, rubber, or some other material which will hold 100 the cigars, and I then draw out the plate from back. This spacer is laid on the bottom of lunder the cigars, thus allowing them to drop

into place in the box. In this manner all the layers may be transferred from the case 2 to the packing-box in a very short time, and as each layer has been flattened in a form of the same width as the packing-box, they will fit the latter very neatly.

I am thus enabled to pack cigars much more rapidly and with more uniformity than

has heretofore been possible.

While the use of the comb or spacer 3 is a desirable feature of my invention, it is not always essential thereto, since-good results are obtainable without its use by depending on the eye to secure proper spacing of the cigars in placing them in the case 2.

I claim as my invention—

1. As an improvement in the art of shaping and packing cigars, the following successive steps: first, arranging a series of layers of cigars and interposed presser-plates, each layer consisting of a definite number of cigars definitely spaced, the spacing being proportioned to the diameter of the cigar, and the number in a row proportioned to the size of the box in which the cigars are to be packed; second, subjecting said series of layers to

compression sufficient to reduce the height thereof proportionately to the height of the box in which said cigars are to be packed, and, finally, transferring the layers as such 30 successively to the box by means of the intermediate presser-plate, substantially as and for the purposes described.

2. As a step in the art of shaping and packing cigars, subjecting a series of layers of 35 cigars and interposed presser-plates to compression, the cigars of each layer being spaced or definitely separated proportionately to the diameter of the cigar and the reduction to be effected to allow for change of form, and, 40 finally, utilizing the interposed presser-plates as carriers for transferring the separate layers as such from the press to the cigar-box or final receptacle, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 7th day of February, A. D. 1889.

WILLIAM F. LANG.

Witnesses:
W. B. Corwin,
THOMAS W. BAKEWELL.