I. K. Prescott.
Hat Pattern Block.
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Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

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To all whom it may concern:

Be it known that I, Ira K. Prescott, a citizen of the United States, residing at Arlington, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Hat-Pattern Blocks, of which the following is a specification.

This invention relates to ordinary straw hat pattern blocks which are usually furnished in a set consisting of the necessary number of patterns required for manufacturing straw or braided hats in the conventional sizes.

In using a set of patterns in the manufacture of a number of hats of various sizes, the operator is required to change patterns in each instance where a difference in size is desired between two successively manufactured hats. In effecting the change of patterns it frequently happens that considerable time which the operator could devote to actual hat making, is wasted in going from place to place, and in selecting, the required pattern; and apart from this the use of a number of patterns is quite expensive since it involves the purchase of a considerable number of pattern units, which are usually of wood and which in addition to needing care to prevent the patterns from splitting or becoming distorted by reason of atmospheric changes, also require considerable space for storage.

The present invention has for its general object to substitute for a set of patterns heretofore used in the manufacture of straw or braided hats, a single pattern which is usable in making any of the conventional sizes of straw or braided hat.

To this end the invention resides in forming the hat pattern in sections and connecting these together so as to admit of their being readily adjustable to produce a pattern of any required conventional size.

Other objects will appear and be better understood from the embodiment of the invention of which the following is a specification.

Reference being had to the accompanying drawings forming part hereof, and in which:

Figure 1, is a bottom plan view of the invention showing a portion thereof broken away to disclose the construction of other parts.

Figure 2, is a vertical cross section of the invention.

Figure 3, is a detail plan on a considerably reduced scale, of the brim board. Fig. 4, is a detail perspective on a reduced scale, of one of the pins for connecting the crown block of the pattern to the brim board. Fig. 5, detail perspective, on a reduced scale, of one of the fillets.

In its construction the pattern of this invention, includes a crown block, designated generally by "a" and a brim board indicated by "b." The crown block "a" may be formed of any material found suitable for the purpose, preference being given to some light metal, as for instance aluminum, which will impart to the block the characteristics of being easily handled and freedom from being damaged by ordinary atmospheric changes. The outer surface contour of the crown block "a" is analogous to those of the crown blocks heretofore used but its cross sectional contour is different in that it is hollow and approximates an inverted dish.

By so constructing the crown block, it possesses the properties of being light in weight and cheap by reason of requiring but a comparatively small amount of metal to construct; and at the same time provides a chamber for the reception of the mechanism hereinafter to be described.

As shown in Figs. 1 and 2, the crown block "a" is formed of a plurality of sections 5, 6, 7 and 8. These sections are connected together by a mechanism indicated generally by "c," which is adapted to move the said sections simultaneously and at the same rate of speed whereby uniformity of adjustment of the sections is had and the contour of the block left unchanged regardless of whatever variations may be obtained in the adjustment of the sections.

The construction of the means "c" from moving the sections of block "a" may be such as is desired to accomplish the result hereinbefore stated. For purposes of illustrations I have shown this mechanism to include a disk 9, provided with a spiral web 10, which meshes with a plurality of worm racks 11, 12, 13, and 14. The said disk being disposed centrally of block "a" and the worm racks arranged radially with respect to the disk and rigidly connected to sections 5, 6, 7, and 8, of block "a"; so that when disk 9, is turned in one direction and held against bodily movement it will operate to move the rack bars 11, 12, 13, 14, and consequently the sections 5, 6, 7, and 8, so as to 110
expand the block "a"; and when turned in the opposite direction will operate through the same instrumentalities to contract the said block. The sections 5, 6, 7, and 8, are respectively formed with the corner portions 15, 16, 17, and 18, of a frame, and the outer ends of the rack bars 11, 12, 13, and 14, have down turned extension 19, adapted to fit in the corner portions 15, 16, 17, and 18, to which they are rigidly secured as by rivets, 20. Disk 9, is held centrally of block "a" by means of a pin 21, which passes through disk 9, and through plate 22, which is formed with guides 23, for the said worm racks. Pin 21, is provided on one end with a head 24, which bears on plate 22, and on its opposite end has a detachable head 25, which bears on an operating handle herein shown in the form of a wheel 26, formed integrally with disk 9. The lower edge of block "a" is disposed for an appreciable distance below the operating mechanism "a", so as to permit the said edge to contact on all points with the surface of the brim board "b" when superimposed thereon as will hereinafter be described.

Obviously when sections 5, 6, 7, and 8, have been adjusted to obtain an expansion of block "a", there will exist between adjacent surfaces of said sections of block "a" spaces whose length and width will be determined by the amount of expansion given the said block "a". In order to fill such spaces and preserve substantial continuity of the upper and lateral surfaces of the block when such spacing between the sections is had, a fillet such as is shown in Fig. 5, and indicated generally by "d" is employed. This fillet is made to conform to the contour of the space between sections 5, 6, 7, and 8, and has the vertical legs 27, which enter the spaces between the edges of the lateral surfaces of the sections. Cross pieces 28, on legs 27, bear on the inner lateral surfaces of the adjacent sections of block "a" and operate to prevent lateral displacement of the fillet. The cross shaped body 29, of the fillet enters the spaces between adjacent surfaces of the tops of sections 6, 7, 4, and 8, and since the area of the spaces between sections 5, 6, 7, and 8, will vary with each different adjustment of the said sections manifestly a different fillet will be employed for each different adjustment of the block "a".

The brim block "b" is made relatively large and on its central portion has the usual jack holes 30—30 for taking the fastening means of the conventional form of jack (not shown). The board "b" has a plurality of sockets arranged in spaced relation to the center thereof. As viewed in Fig. 3, the sockets are arranged in an upper series and in a lower series. The sockets in the upper series are disposed for different distances from the center of the brim board and those in the lower series are disposed for corresponding different distances from the said center. The distance between the center of the brim board and the upper series of sockets progressively increases from the left to the right end of the said series while from corresponding end of the lower series of sockets these distances progressively decrease. The crown block "a" is detachably connected to the brim board by means of pins one of which is shown in Fig. 4, and indicated by 31. These pins pass through eyes 32, formed in lateral lugs 33, arranged on the inner surface of crown block "a", and are removably secured in the hereinbefore mentioned sockets. Now it will be manifest that when the distance between socket 34, in one series and socket 35, in the other series corresponds to the distance between openings 32, in diagonally opposite lugs shown in Fig. 1, and when block "a" is fully contracted, then a pair of pins 31, arranged in sockets 34, and 35, will enter the said diagonally disposed openings when the crown block is superimposed on the brim board.

When the crown block is adjusted so that the previously mentioned pair of openings therein will, in order to align with the pins, require that these be arranged in sockets 34, and 36, then the pattern will be for a larger hat than with the adjustment of the pins previously described; and a still larger pattern will be had by arranging the pins in sockets 37 and 38, and adjusting the crown block so that the said pair of openings will align with the pins; and a still larger pattern will be had for an adjustment of the crown block sections to take pins arranged in sockets 36 and 38, or in sockets 38 and 39.

In order to obtain a size of pattern intermediate, of two sizes one obtained with pins arranged in sockets 34 and 35, and another with pins arranged in sockets 34 and 36, the pins 31, are made with cross sectional areas appreciably less than the areas of openings 32, so as to permit the required amount of expansion of the crown block to obtain the desired size of pattern without removing the pins.

In using the operator adjusts the crown block to the required size for the hat to be made. This done the proper size of fillet "d" is arranged in the spaces between the sections of the block. The block is then used in the same manner as the blocks hereetofore provided in the making of straw crowns. After the making of the crown and with the pins 31, arranged so as to enter the openings in block "a" the latter may be superimposed on board "b" after which the blocking of the hat is carried on in the usual manner.

What is claimed as new is:

1. In a pattern for use in connection with the manufacture of braided hats of various sizes, a brim board, a crown block superim-
posed on the brim board and detachably connected thereto, and cooperating therewith to conform to the contour of a braided hat said crown block including a plurality of sections arranged in spaced relation one to the other, a fillet disposed in the spaces between the said sections and means for moving the said sections radially.

2. A pattern for use in connection with the manufacture of braided hats of various sizes, the combination of a brim board provided with sockets, an expansible crown block superimposed on the brim board and including a plurality of sections having perforate lugs, and pins passing through the said lugs and into the sockets of the brim board.

3. A pattern for use in connection with the manufacture of braided hats, the combination of a brim board provided with sockets, a crown block superimposed on the brim board and including a plurality of sections and pins disposed in the sockets of the brim board and connected to the sections of the crown block.

4. In a pattern for braided hats a brim board having a plurality of sockets disposed for different distances from the center thereof and pins arranged in two of said sockets, an expansible crown superimposed on the brim board and connected to said pins.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses, this 15th day of December, 1915.

IRA K. PRESCOTT.

Witnesses:

Alice Adams,

M. E. Laughlin.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
It is hereby certified that Letters Patent No. 1,209,756, granted December 26, 1916, upon the application of Ira K. Prescott, of Arlington, New Jersey, for an improvement in "Hat-Pattern Blocks," were erroneously issued to Alfred K. Levy, as assignee of the entire interest in said invention, whereas said Letters Patent should have been issued to the inventor, said Prescott, and Alfred K. Levy, jointly, said Levy being assignee of one-half interest only in said invention, as shown by the records of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 30th day of January, A. D., 1917.

[SEAL.]

F. W. H. CLAY,

Acting Commissioner of Patents.