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1,525,796

E. J. BLISS

MERCHANDISE STOCK INDICATOR

Filed Sept. 30, 1924 2 Sheets Sheet 1

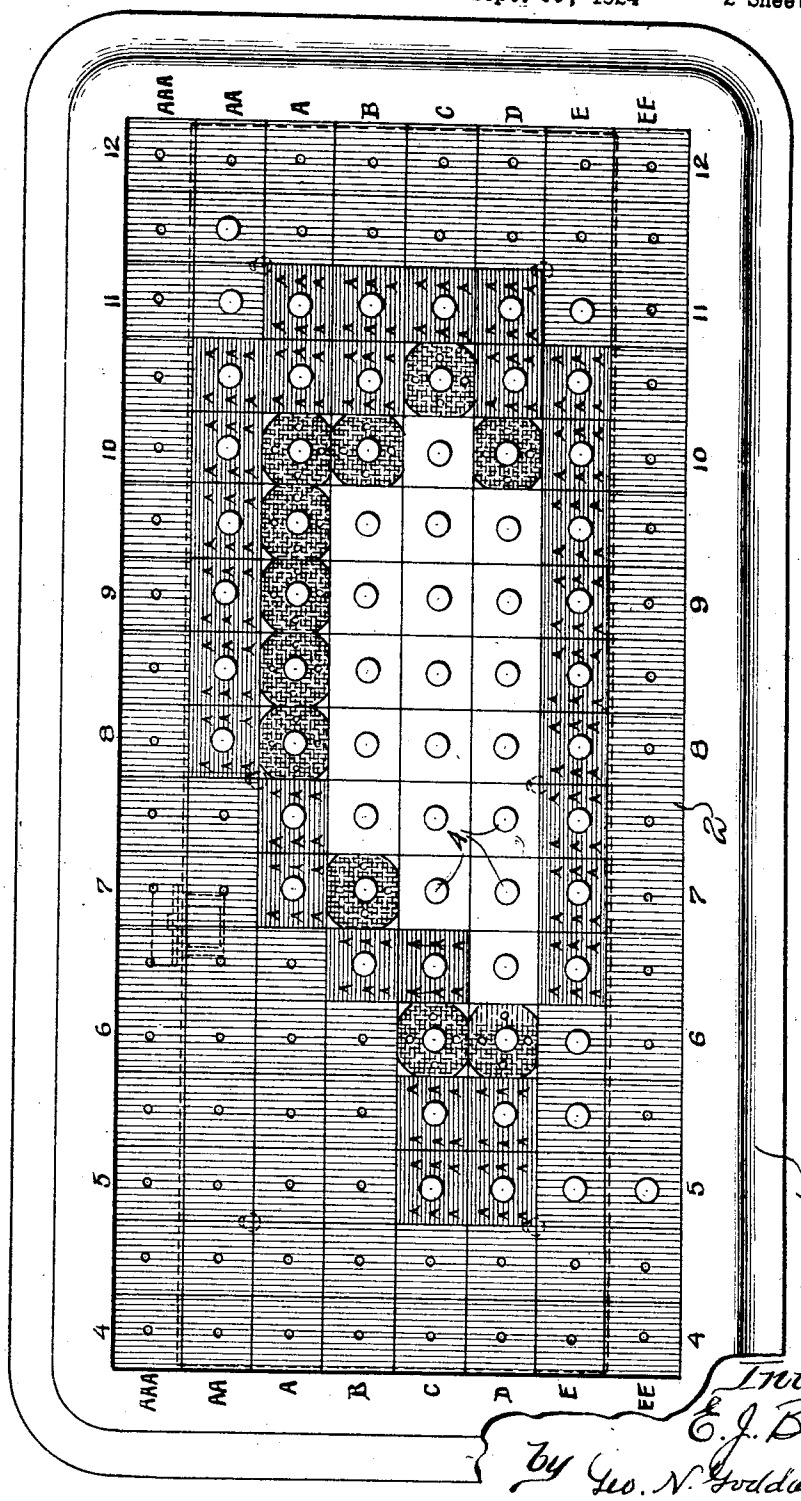


Fig. 1.

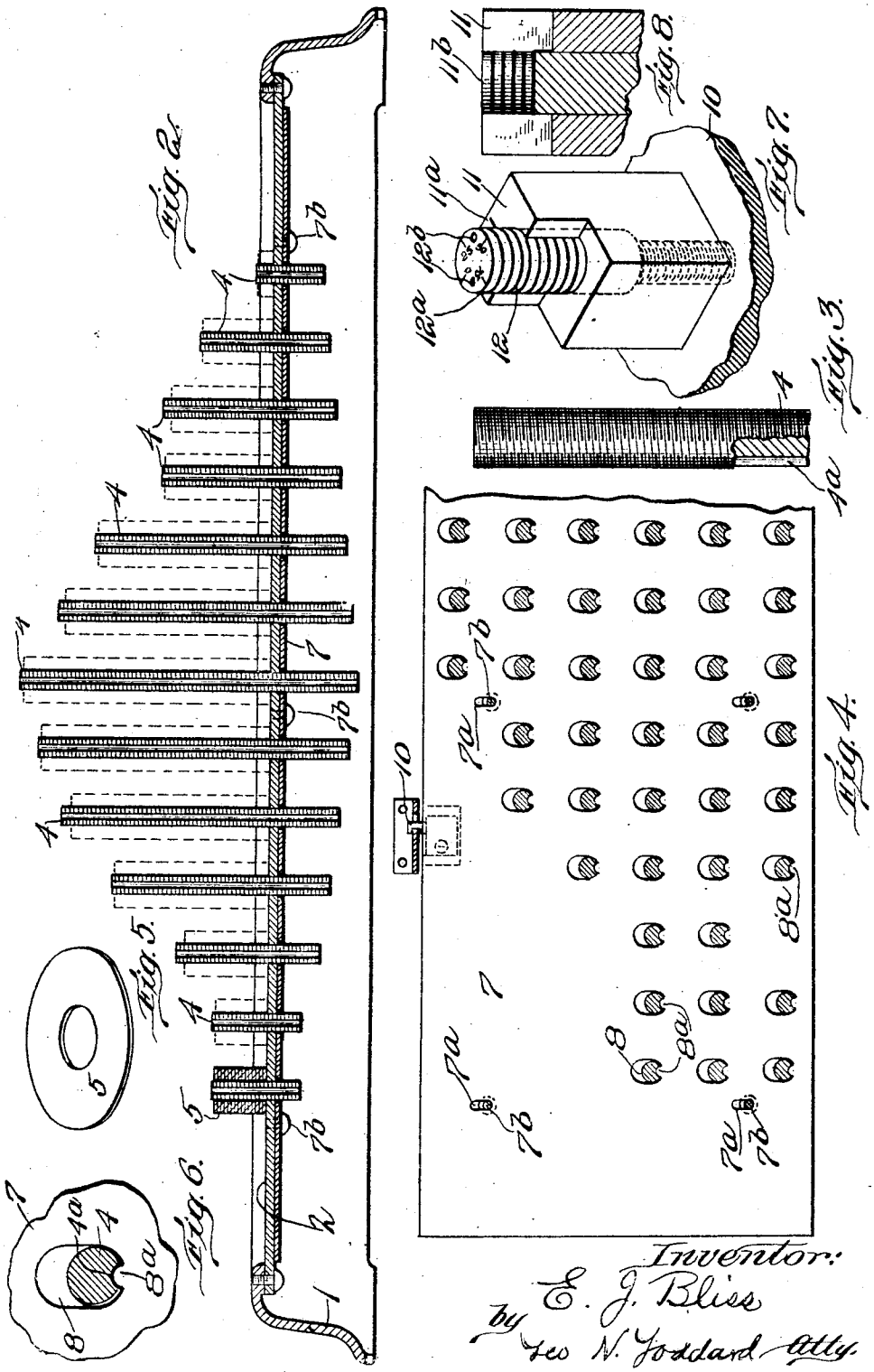
Inventor:
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MERCHANDISE STOCK INDICATOR

Filed Sept. 30, 1924 2 Sheets-Sheet 2



Inventor:
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UNITED STATES PATENT OFFICE.

ELMER J. BLISS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO REGAL SHOE COMPANY, OF WHITMAN, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

MERCHANDISE-STOCK INDICATOR.

Application filed September 30, 1924. Serial No. 740,742.

To all whom it may concern:

Be it known that I, ELMER J. BLISS, a citizen of the United States, and resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Merchandise-Stock Indicators, of which the following is a specification.

This invention has relation to the visual indication of merchandise stock in stores, warehouses or factories, and is intended to provide a compact and convenient device by means of which sales-managers and shop-managers may, at a glance, determine the condition of the stock or merchandise on hand in relation to over or under supply of differently designated articles carried in stock. If properly used the device constitutes a daily check against an over supply of merchandise for which there is but little demand, and forms a guide for the protection of the dealer and manufacturer against carrying either an inadequate supply of some sizes or an over supply of other sizes or units.

The embodiment of the invention herein shown is intended for use in connection with the business of shoe dealers and shoe manufacturers, but it will be understood that the principle is applicable to other kinds of merchandise than shoes where different sizes or styles meet with considerable variations in the effective purchasing demand.

In its general features the invention comprises a supporting base with which is combined two series of co-ordinated size-indicating members mounted thereon in juxtaposition, the individual units of one series corresponding in their relative heights to the normal relative quantitative demand for the respective sizes, the individual units of the other series having like correlation in height to the different designated sizes, one set of members having threaded engagement with the base so as to permit any desired change in height of the individual units thereof. The underlying principle of this merchandise stock-board is that in all cases where the size designated member, corresponding to the normal demand, is at the same level or height as the associated member corresponding to the actual supply on hand the stock is in normal condition, while any difference in level between the two associated juxtaposed units designated by the same size will visibly indicate either a deficiency or an excess condition of stock in respect to that particular size of shoes, according to the position of the actual stock-indicating member below or above the level of the normal stock-indicating member.

It will also be understood that the relative heights of the members intended to indicate the normal demand or supply is ascertained by a study and compilation of actual sales made over a substantial period of time in stores located in different parts of the country, and that a store located in a southern or a western city does not necessarily have the same relative demand for different units or sizes that obtains in other sections of the country. Hence, it is desirable and important that the main or central office in sending out these stock-indicator boards shall have each board adjusted in accordance with the ascertaining local demand for the region where the board is to be used.

These and other features of the invention will be described in the following specification and will be defined in the claims hereto annexed.

In the accompanying drawings I have illustrated two different forms of construction and arrangement embodying the principles of this invention, in which:

Figure 1 is a plan view of an indicator-board for a shoe store.

Figure 2 is a longitudinal sectional elevation thereof.

Figure 3 is a detail view showing one of the adjustable size designated posts intended to be mounted and located in the base.

Figure 4 is a bottom plan view showing the locking means by which all the axially adjustable posts are located when set to proper position of adjustment.

Figure 5 is a perspective view of one of the stock-indicating counters.

Figure 6 is an enlarged detail showing the relation of the locking plate to an individual adjustable post.

Figures 7 and 8 show a modified form of construction and arrangement of the individual size-designated units associated together in one case to show an excess supply above normal, and in the other case to show a deficiency in supply.

In the practice of this invention, accord-

ing to the illustration of the drawings, I provide a frame 1, provided with a table or platform 2 ruled into squares by intersecting columns, the different columns being numbered from 4 to 12, in correspondence with the aforesaid sizes of shoes, and the intermediate columns indicating half sizes.

On each end of the board are the width-size indicating letters from A A A to E E.

In each square is mounted a rod or post 4, which is vertically adjustably to different heights by means of a screw-threaded connection with the supporting base. Each threaded post 4 is provided with a longitudinal key-way 4^a for locking purposes as will presently be described. The post mounted in the square that lies in row C and in column 8 would obviously be thus designated as size 8C which happens to be the size for which there is the greatest demand for sale in shoe stores in most parts of the country.

As a cautionary expedient the post-containing squares corresponding to those sizes for which there is the largest demand may be given a distinctive color such as white. Those squares indicating sizes of next less importance in demand may be given a distinctive color, such as blue; those still less in demand may be colored yellow, while those for which the demand is insignificant and the danger of over-stocking is, therefore, greatest may be colored red.

For retail store service there may be provided a series of counters, in this case, in the shape of annular washers 5, one counter corresponding to each pair of shoes.

Let us suppose that the home office or factory-manager, after careful study of returns from the individual stores, has ascertained the normal requirements or demand of the various shoe sizes for such store. The posts corresponding to the different sizes are then adjusted to the proper heights or levels so that their relative heights will visibly indicate the relative demand for the individual sizes represented on the board. For each pair of shoes placed in stock a counter is placed on the post designated or indicated for that particular size; hence a normal stock-board would show the pile of counters around each post extending up to the same level as the top of the properly adjusted post. Then as each pair of shoes is taken out of stock a counter is taken from the post designated for that size, while the addition of each pair of shoes to the stock on hand is indicated by the placing of a counter in its appropriate pile. Obviously, if the pile of counters is higher than the post which they surround it indicates an over supply, while if the post projects above the level of the counters it indicates a deficiency in that size.

To protect against meddlesome or inadvertent adjustment of the posts there is provided a locking device which comprises, essentially, a plate 7 provided with slots 7^a through which project retaining pins or screws 7^b, which are fastened in the bottom of the platform or base 1.

In addition to these guide slots which receive the retaining pins there is an elongated member 8 which receives the downward projecting end of each post 4, and which is provided with a short tongue 8^a at one end to project into the longitudinal keyway 4^a formed on the side of each post.

When the posts are adjusted to the proper level to correctly indicate a normal stock for a given store, the locking plate 7 is slid into locking engagement with the keyways all of which are turned toward the locking tongues 8^a, as indicated in Figure 4. When the plate has been shifted to the aforesaid locking position it is then locked in place by any convenient form of key lock, as indicated at Figure 10 so that it can not be tampered with.

It will, therefore, be seen that different boards of the same construction may be set to correspond to the normal demands of stores having a widely differing trade and, consequently, having its own peculiar normal requirements.

A mere glance over the indicator board at the close of business each day informs the store-manager in an accurate and vivid manner of the exact condition of his stock on hand as compared with what it normally should be.

The same principle of adjustable post may be used for a master-board at the factory to keep track of the whole supply condition of all the stores tributary to the factory or central office. In Figures 7 and 8 I have shown the principle applied to such a master-board in which case the individually removable counters are dispensed with and the stock condition indicated by the position of the adjustable screw with reference to a juxtaposed member corresponding in height to what is considered a normal demand. In this case the board 10 carries an outside sleeve member 11 having a registration mark 11^a, and having also on its inside a series of spaced rings 11^b at graduated distances from the top for a purpose presently to be described.

The post 12 is threaded at its lower end to engage the base 10, and has its upper portion provided with spaced rings 12^a, each space corresponding to the axial travel of the post on one revolution induced by the threaded connection with the base. In this case it is assumed that each revolution of the screw indicates either the addition of one hundred pairs or the subtraction of one hundred pairs from stock. The top end of the post is subdivided by radial marks, num-

bered according to the arc of its circumference to indicate 25, 50, 75 and 100 pairs. The top of the post is provided with poles 12^b for a spanner wrench so that the post may be turned when its top is below the level of the gauging member or sleeve 11. The sleeve is preferably cut away on one side for a distance below its top in order to more effectively expose to view the interior measuring rings 11^b.

In the position shown in Figure 7 the post is in a position to indicate an excess of two hundred and twenty-five pairs of the size by which the post is designated.

In Figure 8 the post indicates a deficiency of about five hundred pairs since each measuring ring inside of the sleeve 11 indicates a deficiency of one hundred pairs.

The scheme of adjusting the post to register changes in stock is preferred for use in a master-board because of the large number of counters that would need to be handled where the total pairs of more active sizes would run into very large numbers.

It will, therefore, be seen that the principle of the vertically adjustable post is applicable with advantage either to the retail store board and in comparatively small quantities of shoes, or for the master-board which carries the total stock in all the stores.

It will, therefore, be seen that essentially the device comprises a series of normal gauging members combined with associated stock-indicating members one of which is axially adjustable to indicate the relation between the normal standard of supply and the actual stock on hand for each individual class of merchandise.

What I claim is:

1. In a merchandise stock indicator, the combination of a supporting base, two series of size designated members, one of each series being associated with one of the other series, and being axially adjustable by means of a threaded connection with the base, whereby the relative heights of a pair of associated members is utilized to visualize differences between stock on hand and a normal supply, substantially as described.

2. In a merchandise stock indicator, the combination of a supporting base, a series of size designated posts mounted thereon and vertically adjustable as to height, a surrounded sleeve of removable sections, and means for locking the posts in predetermined position of adjustment, substantially as described.

3. In a merchandise stock indicator, the combination of a supporting base, a series of size-designated axially adjustable posts adjusted as to height relation in correspondence with the ascertained proportions of the demand for the different sizes by which they are designated, and a series of counters representing items of stock arranged around the different size designated posts, in correspondence with the actual stock on hand of such sizes, substantially as described.

4. In a merchandise stock indicator, the combination of a supporting base, a series of size designated posts adjustable in height to conform to the proportionate demand for items of different size, removable counters associated with the respective posts and built up in relation thereto so as to indicate by their relative heights in comparison with their associated posts the relation of the stock on hand to the ascertained normal demand, and common means for locking all said adjustable posts in their adjusted positions, substantially as described.

5. In a merchandise stock indicator, the combination of a supporting base, a series of size-designated posts mounted therein and being adjustable axially by means of threaded connection therewith, said posts being spaced to receive counters and being longitudinally slotted, a locking member provided with a series of tongues arranged to be moved into and out of said slots, whereby the posts may be adjusted to appropriate relative heights in correspondence with the proportionate demand for items of the different sizes and may be securely locked in such positions, substantially as described.

6. In a merchandise stock indicator, the combination of a supporting base, a series of size designated axially adjustable spaced posts of different heights having threaded connection with the base to permit their being adjustable to different heights to indicate the relative normal demand for the different items indicated, a locking plate movably mounted on said base provided with means for interlocking with the respective posts to hold them against further adjustment, and means for locking said plate in such interlocking position, substantially as described.

7. A merchandising stock board embracing in its construction a raised hollow frame, a base plate mounted thereon and having its upper surface divided into distinctive size-indicating squares, a series of upright posts of different lengths mounted in the respective squares and adjustable by threaded connection with said base plate, coordinate members surrounding said posts and serving by their individual height relation to the upper ends of said posts to visualize lack of conformity between a normal supply and the actual stock on hand of different items of merchandise, substantially as described.

In witness whereof, I have subscribed the above specification.

ELMER J. BLISS.