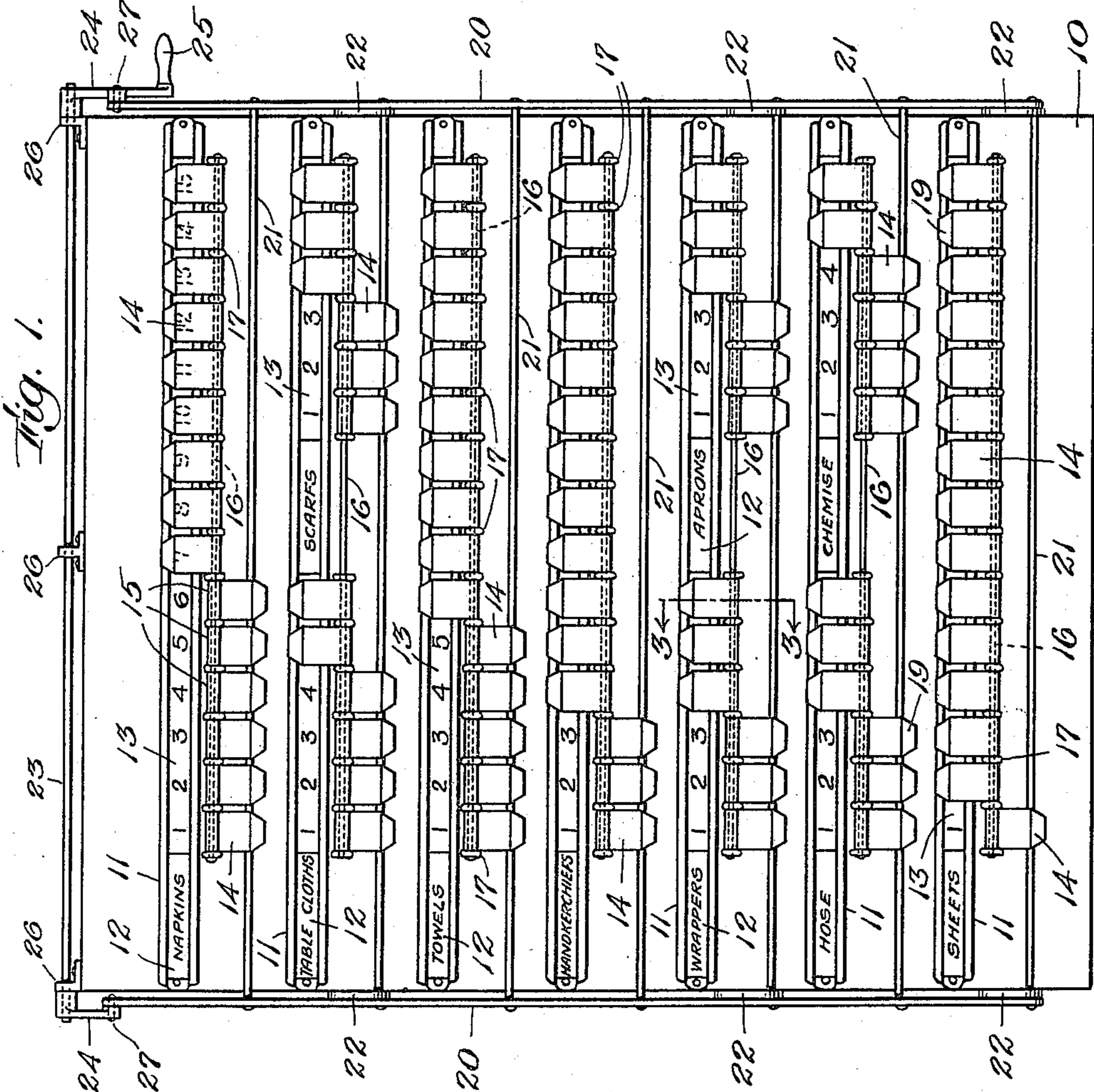
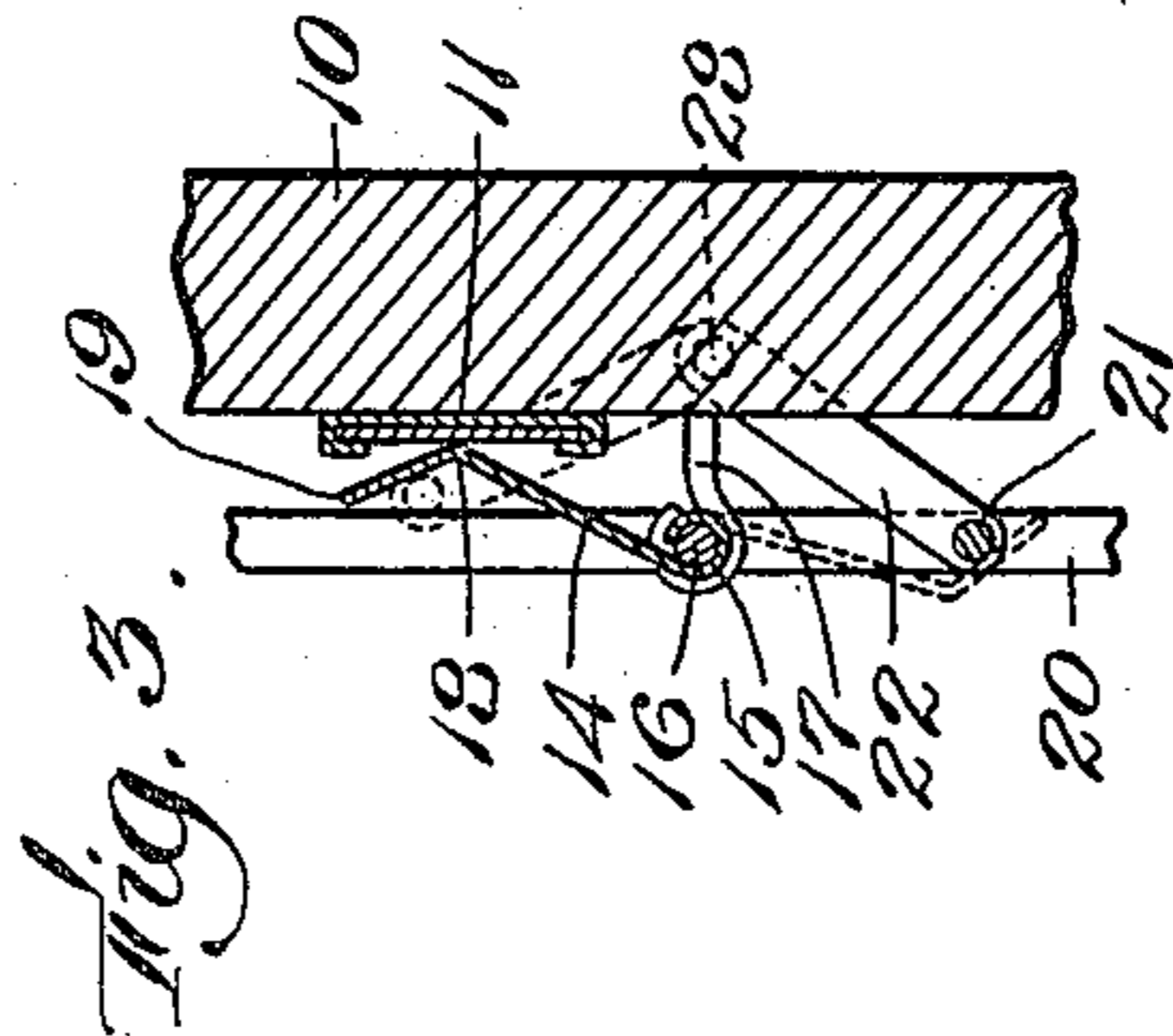
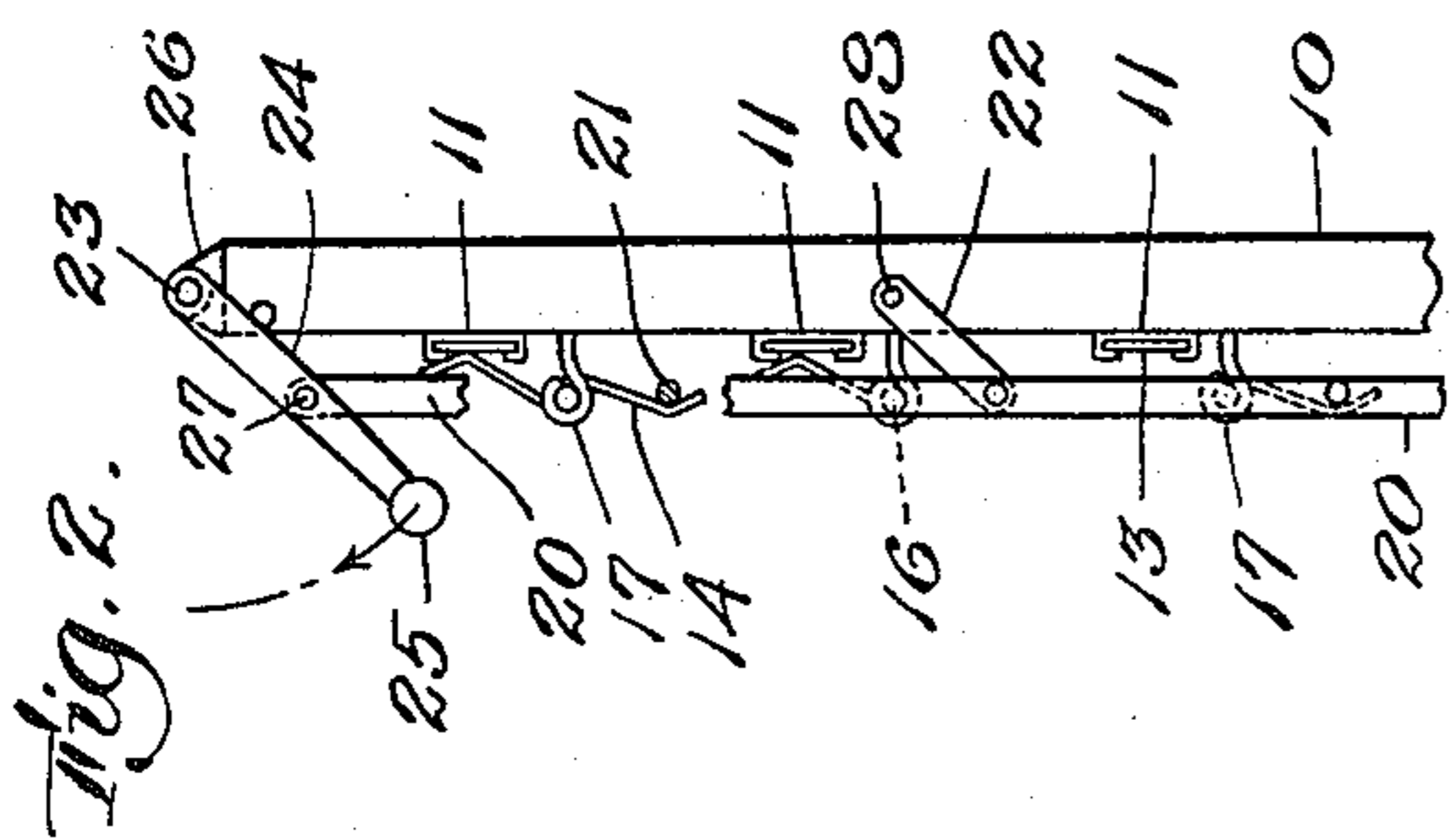


T. I. FREEBURN.  
TALLY DEVICE.  
APPLICATION FILED MAR. 20, 1915.

1,154,854.

Patented Sept. 28, 1915.



Inventor:  
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# UNITED STATES PATENT OFFICE.

THOMAS I. FREEBURN, OF WINCHESTER, MASSACHUSETTS.

## TALLY DEVICE.

1,154,854.

Specification of Letters Patent.

Patented Sept. 28, 1915.

Application filed March 20, 1915. Serial No. 15,780.

*To all whom it may concern:*

Be it known that I, THOMAS I. FREEBURN, a citizen of the United States, and resident of Winchester, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Tally Devices, of which the following is a specification.

The object of the present invention is to provide a device whereby a count may be kept of a plurality of articles of various descriptions, as for example, the various articles of wearing apparel and household use which are handled by laundries.

The invention comprises tabs each adapted to represent an article, numbers arranged to coöperate respectively with said tabs to indicate the number of articles, and labels or name plates each adapted to indicate the kind or character of the article. The tabs, numbers, and labels are all organized to facilitate the keeping of a tally, the several tabs being arranged to initially conceal the numbers but being movable to expose the numbers, so that each tab may be moved manually, as occasion requires, to expose a number of a number series.

In addition to the aforesaid elements of the tally device, the invention comprises manually operative means arranged to act upon all the tabs which have been displaced from their initial positions, to return them to said positions after the tally of each lot of articles has been recorded.

Of the accompanying drawings, which illustrate one form in which the present invention may be embodied: Figure 1 represents a front elevation of a tally device, some of the tabs of which have been displaced from their initial positions, the remainder of the tabs occupying their initial positions. Fig. 2 represents a side elevation of the upper portion of the device. Fig. 3 represents a vertical section, on a larger scale, as indicated by line 3—3 of Fig. 1.

The same reference characters indicate the same parts wherever they occur.

The foundation of the device as shown consists of a baseboard 10. Strips 11 of thin sheet metal of channel cross section are fastened to the baseboard to hold labels or name plates 12 and number strips 13. The channel strips 11 are open at their ends, and the labels 12 and number strips 13 may be mounted in the channel strips by moving them endwise into the ends of the channel strips

and sliding them to the desired positions. Each label 12 bears the name of an article; for example, "Napkins," "Table cloths," "Towels," "Handkerchiefs." There may be any desired number and assortment of such labels. Each number strip 13 bears the numbers 1, 2, 3, 4, 5, and so forth, arranged in sequence; and each number strip and label which are intended to coöperate with each other are arranged in contiguous end-to-end relation as shown.

The baseboard is provided with a plurality of series of tabs 14 each of which represents an article. Each tab as shown is made of thin sheet metal and is formed with a substantially tubular hinge portion 15. (See Fig. 3.) All the tabs of each series are arranged upon a hinge-rod 16, the board being provided with such rods to the number of series required. The rods as shown are supported by screw-eyes 17 whose shanks are screwed into the board. I preferably employ a sufficient number of screw-eyes 17 to keep the tabs spaced laterally from one another and to keep the tabs from being displaced longitudinally of the rods. Each tab as shown is disposed between two screw-eyes 17. Each tab as shown has a bend 18 whereby its free end 19 is caused to stand away from the baseboard, when the tab is in its initial position, to facilitate manipulation. The spacing of the numerals on the number strips is substantially the same as the lateral spacing of the tabs of each series, and the elements are so organized that when the tabs are in their upper positions they stand in front of and conceal their respective numerals on the number strips.

The device is intended to be operated as follows: Assuming that the sorter, that is, the person who sorts the articles, is about to sort and record a plurality of articles of a lot, he will set aside the articles one by one and will turn down one tab for each article so set aside. For example, supposing the first article picked up is a napkin, the sorter will deposit that article in an appropriate place or receptacle and will turn down the first tab of the "Napkins" series. If the next article is a napkin, the sorter will turn down the second tab of the "Napkins" series, and will continue to turn down one additional tab in this series for each napkin found in the lot. In like manner the sorter will turn down the first tab of the "Table cloths" series upon picking out the first

table cloth from the lot, and will turn down an additional tab of that series for each table cloth found in the lot. This method of procedure will be followed, due consideration being given to articles of other description, until all the articles of the lot in question have been sorted and enumerated on the tally device. The tally device then affords a reading from which the sorter can tell at a glance how many articles of each kind or description have been handled, and a record of such articles may be readily made with paper and pencil. For example, assuming that the condition of the tally device as shown by Fig. 1 indicates the kinds and quantities of articles which have been handled, the sorter can see at a glance that six napkins, four table cloths, three scarfs, five towels, three handkerchiefs, three wrappers, three aprons, three hose (pairs), three chemises, and one sheet, are indicated for the purpose of record; and when a suitable record has been made, the tally device may be restored to its initial condition by returning the displaced tabs to their respective number-concealing positions.

The device is provided with means whereby all the displaced tabs may be simultaneously returned by a single operation to their number-concealing positions. The said means includes a frame or grid consisting of parallel side bars 20, cross-rods 21, pivoted links 22, a rockshaft 23, operating arms 24, 24, and a handle 25. The handle as shown is carried by one of the arms 24. The rockshaft 23 is arranged in bearing members 26. The arms 24 are affixed to the rockshaft and are connected to side bars 20 by pivot pins 27. The links 22 are connected to the baseboard 10 by pivot pins 28, and their free ends are pivotally engaged with some of the cross-rods 21. The combined action of the arms 24 and links 22 gives the grid a bodily curvilinear movement like that of a parallel ruler, to the end that the several cross-rods 21 will all have the same kind and the same degree of movement. The several cross rods 21 are arranged below the respective series of tabs with which they are intended to cooperate, and are arranged to be lapped by the free ends of the tabs when the tabs are turned down. A sufficient movement of the handle 25 in the direction indicated by an arrow in Fig. 2, will cause the several rods 21 to restore all the downturned tabs to their respective initial positions, the rods passing upwardly in front of the hinge-rods 16 in the course of returning the tabs. In Fig. 3 one of the rods 21 is represented by solid lines in its lower or initial position, and is represented by dotted lines in its upper position, a link 22 being also represented in the two positions corresponding to those of the rod. This figure also includes one of the tabs 14 represented by dotted lines in its

lower position and represented by solid lines in its upper or number-concealing position.

Although I have shown the number strips arranged to be concealed by the tabs when the latter are in their upper positions, the scope of the invention should not be limited in this respect, for it would be possible, though not so desirable, to arrange the number strips to be concealed when the tabs are in their lower position, and to be exposed when the tabs are raised. Furthermore, the invention should not be limited, excepting where so specified, to the character or direction of movement of the tabs, for the invention contemplates the combination of one or more number series and number-concealing devices capable of being moved from number-concealing position for the purpose specified, without any undue limitation as to the character, direction, or extent of such movement.

It is apparent that the labels 12, number strips 13 and tabs 14 may be readily rearranged to suit various requirements. For example, the labels and number strips are interchangeable; that is to say, they may be withdrawn from the channel strips 11 in which they are shown and may be inserted into any of the other channel strips without otherwise disturbing the device. For example, the device as shown has provisions for keeping tally of six aprons and fifteen sheets. If it should be desired to rearrange the device so as to have provisions for keeping tally of fifteen aprons and six sheets, the "Sheets" label and the "Aprons" label could be readily interchanged. This would be accomplished by withdrawing the "Sheets" label from the left-hand end of its holder and withdrawing the number strip at the right of "Aprons" and the "Aprons" label from the right-hand end of their holder, replacing the labels in the desired positions and replacing the withdrawn number strip in its former position. Other rearrangements of a similar nature can also be effected without disturbing the operating mechanism.

It is not always possible to determine in advance the most desirable arrangement and assortment of the several indicating elements, and sometimes it becomes necessary to vary the arrangement and assortment after the device has been in use. The tabs 14 are capable of being easily detached, independently of each other, from the hinge-rods 16, without disturbing any other elements of the device, and said tabs may be readily replaced upon the rods with equal facility. If it should be desired to divide one of the series of tabs into two or more series and to provide additional labels 12 in accordance with such change, the change could be easily effected as follows. Supposing it were found that there were more than the neces-

sary number of tabs in the "Sheets" series and that it would be desirable to use some of the tabs in said series for keeping tally of articles of another kind, the necessary  
5 change could be made by detaching two or three of the tabs in the original "Sheets" series to leave a blank space for an additional label 12. The detaching of the unnecessary tabs would be readily effected by  
10 grasping the tubular portion 15 of each tab with a pair of pincers and moving the latter to bend open the tubular portion. Having divided the original series of tabs into two series, a corresponding change would be  
15 made in the original "Sheets" number strip 13 by withdrawing the latter from its holder and cutting off the right-hand portion at a point consistent with the number of tabs remaining in the "Sheets" series. An additional  
20 label could then be placed in the holder to register with the gap left by the detached tabs, and an additional number strip could be placed in the holder to co-operate with the remaining tabs at the right  
25 of such gap.

I claim:

1. A tally device comprising a supporting element, an indicating element including a

series of freely movable hinged drops mounted upon said supporting element, one 30 of said elements bearing a series of numerals arranged to be concealed respectively by said drops when the latter are up, and exposed to view when said drops are down, said drops being arranged to cross their top 35 vertical center sufficiently to remain in number concealing position against said supporting element, and means arranged to move said drops, or as many of them as are in exposing position, to concealing position. 40

2. A tally device comprising a base, a plurality of parallel series of hinged drops mounted thereon, each of said drops being free to move from a predetermined initial position to a predetermined tally-indicating 45 position, and vice versa, a movable grid including a plurality of parallel bars arranged to engage all the said drops of the several said series respectively, and means connecting said grid and base to guide said grid so 50 as to move said drops, or any number of them, from said tally-indicating position to said initial position.

In testimony whereof I have affixed my signature.

THOMAS I. FREEBURN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."