(No Model.)

W. C. KLAUSER.

ADJUSTABLE TIME TABLE OR INDICATOR.

No. 457,204. Patented Aug. 4, 1891.

Fig. 1.

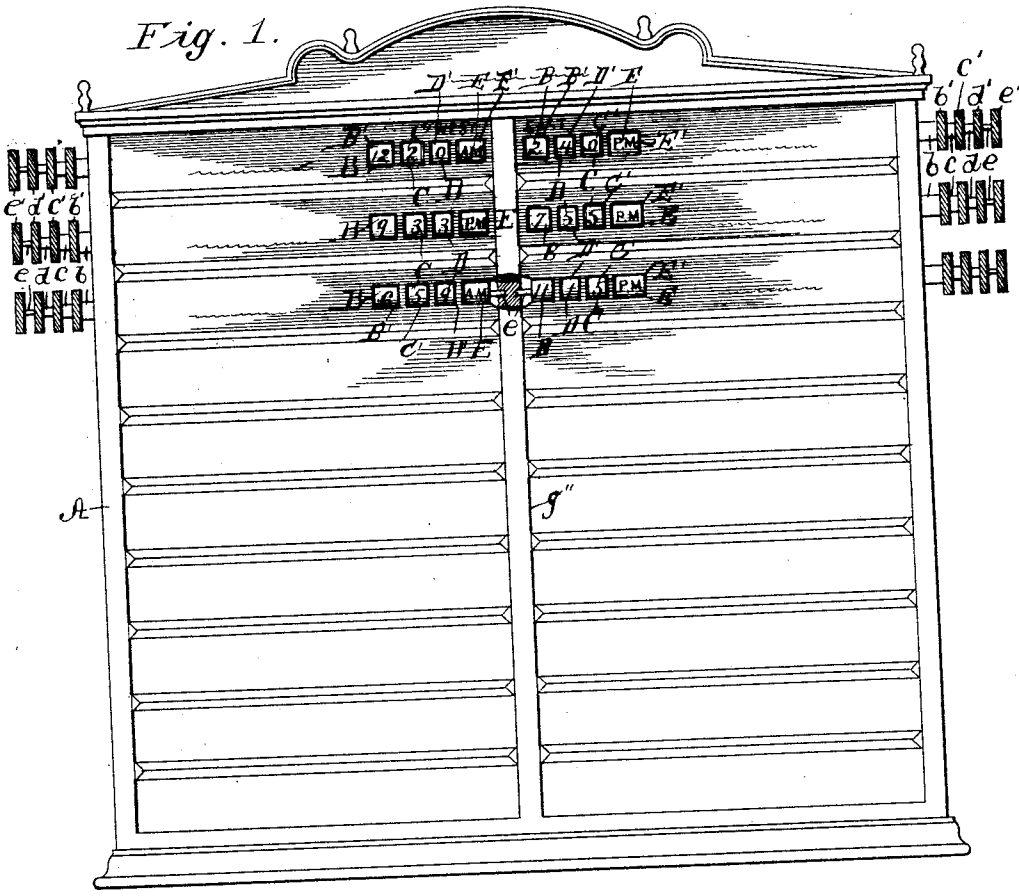


Fig. 2.

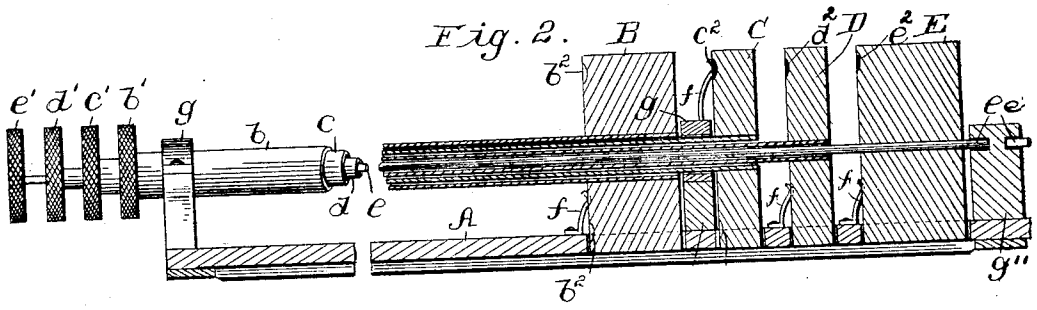
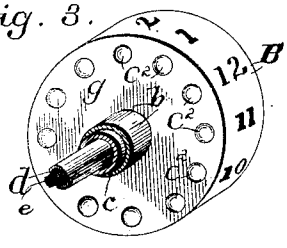


Fig. 3.



Witnesses:
C. Y. Thorpe.
W. R. Jones

Inventor
W. C. Klauser.
By Hugdon & Hugdon, Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM C. KLAUSER, OF TOPEKA, KANSAS, ASSIGNOR TO WILLIAM C. KNOX, SAMUEL C. GARRARD, AND EDITH A. KLAUSER, ALL OF SAME PLACE.

ADJUSTABLE TIME TABLE OR INDICATOR.

SPECIFICATION forming part of Letters Patent No. 457,204, dated August 4, 1891.

Application filed November 14, 1890. Serial No. 371,434. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. KLAUSER, of Topeka, Shawnee county, Kansas, have invented certain new and useful Improvements in Adjustable Time Tables or Indicators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improvement in adjustable time tables or indicators; and it consists in the novel combination and arrangement of devices, as will be fully set forth hereinafter and claimed.

My object is to provide a device consisting of a series of shafts arranged concentrically one to another and adapted to operate independently of each other, and provided each near their inner ends with a rigidly-secured disk or cylinder, having on their peripheries a series of numbers when used as a railroad-indicator, which are adapted when operated to alternately appear directly in the rear of a suitable opening or space through the sign-board, to the rear side of which the shafts are loosely journaled. When used as a railroad time-table you may divide the bulletin-board into sections indicating arriving and departing trains by a centrally-arranged bar or bearing, from which a double series of shafts extend in either direction, and are provided with the cylinders or disks having the suitable figures thereon, and also disks, one to either side of the dividing bar, provided each with morning and afternoon symbols "A. M." and "P. M."

These indicators may also have suitable letters or figures on the cylinders or disks, be used for indicating prevailing prices in market-houses, and may also be arranged in suitable positions in hotels, for the convenience of guests, to be used for calling purposes, and in other public places for the purpose of indicating weather-reports, horse-races, ball-games, &c.

Referring to the drawings which illustrate this invention, Figure 1 represents a face view of a time table or indicator suitably divided for trains going east and west, and constructed in accordance with my invention. Fig. 2 is a horizontal section of the same, partly broken away, showing the series of concentrically-arranged shafts provided with their respective disks or cylinders. Fig. 3 is a detail perspective view of one of the disks.

Similar letters refer to similar parts throughout the several figures, in which—

A represents a board provided with the vertically-extending bar g'', in which is journaled the inner end of the horizontal and laterally-extending rod or shaft e and e, provided on its outer end, a suitable distance beyond the outer side of the bulletin-board A, with thumb-wheel e'. Keyed or otherwise rigidly secured on this shaft e, adjacent to the vertical bearing-bar g'', is the cylindrical disk or cylinder E, provided with the symbols "A. M." and "P. M." on opposite sides of its periphery. Arranged concentrically to the shaft e and to each other are the shafts d, c, and b, provided with disks on their inner ends, which extend successively to within a suitable distance of the disk E, the shaft d surrounding the shaft e having the disk D keyed or otherwise secured thereon, the shaft c surrounding shaft d having the disk C, and the shaft b surrounding the shaft c having the disk B secured thereon in suitable manner. The several concentrically-arranged shafts are provided between the thumb-disks e' and the outer edge of the bulletin-board A with the intermediate and successively-arranged thumb-disks d', c', and b'. The outer shaft b, being suitably journaled in bearing g projecting from the rear side of the board A, supports the outer end of the concentrically-arranged shafts in position, as will be readily understood.

Disk B, keyed on the inner end of the shaft b, is provided with the numbers from 0 to 12, inclusive, the intermediate and smaller disks C and D, having on their peripheries the numbers from 0 to 9, inclusive, thus allowing when the disks are operated the desired time to appear immediately in the rear of the openings B′ and C′ and D′. As illustrated at Fig. 1 at 12.20 a. m., 9.33 p. m., &c., the disk E, provided with the oppositely-arranged symbols "A. M." and "P. M.," is arranged correspond-

ingly, with the proper symbols appearing in the rear of the opening E′, as will be readily understood.

I may, if necessary, provide additional bearings *g* to assist in supporting the inner ends of the several shafts. To prevent the accidental moving of any of the disks when operating one, I provide a tension-spring *f*, secured at one end to the rear side of the bulletin-board A on bearings *g*, the opposite free end curved, as shown, adapted to bear successively in slight recesses b^2, c^2, d^2, and e^2 in the adjacent face of the several disks as they revolve. The spring *f* requires the revoluble power to be applied directly to the thumb-disk secured on its shaft and prevents the movement of said disk from any accidental contact with its thumb-disk, as will be readily understood.

The bulletin-board being provided with the eastern and western time-schedule, as illustrated in Fig. 1, the several concentrically-arranged shafts *b*, *c*, *d*, and *e* are journaled in the bearings *g* and *g″*, as described. In this connection, with the shafts extending in oppositely-arranged directions, as shown in Fig. 3, the disks B and E are secured, respectively, on the inner ends of the shafts *e* and *b* to allow the disks provided with the numbers from 0 to 12, inclusive, to appear at the left and therefore the correct reading of the time. The disk provided with the symbols "A. M." and "P. M." being secured on the end of the shaft *b*, the arrangement of the intermediate disks C and D being similarly constructed and numbered need not be changed, as will be readily understood.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a time table or indicator, the bulletin-board provided with a series of openings B′, C′, D′, and E′, the series of concentrically-arranged shafts *b*, *c*, *d*, and *e*, the disks or cylinders B, C, D, and E, secured on the inner ends of the shafts in rear of said openings, and the thumb-disks *b′*, *c′*, *d′*, and *e′*, keyed on the outer ends of shafts *b*, *c*, *d*, and *e*, respectively, substantially as described.

2. In a time table or indicator, the bulletin-board having the dividing bar or bearing *g″*, the double series of similarly-arranged concentric shafts extending in opposite directions and provided with the suitably numbered or lettered disks B, C, and D, the said disks having oppositely-arranged symbols, substantially as described.

3. In a time table or indicator, a bulletin-board having journaled loosely in bearings *g* the concentrically-arranged shafts, the numbered or lettered disks on the end of said shafts and provided with the slight recesses or depressions b^2, c^2, d^2, and e^2, arranged concentrically to the said shafts, and the tension-spring *f*, secured at one end, the opposite curved end bearing successively in the said recesses in the disks as the thumb-disks are operated, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. KLAUSER.

Witnesses.
H. C. HODGES,
THOS. L. ROSS.