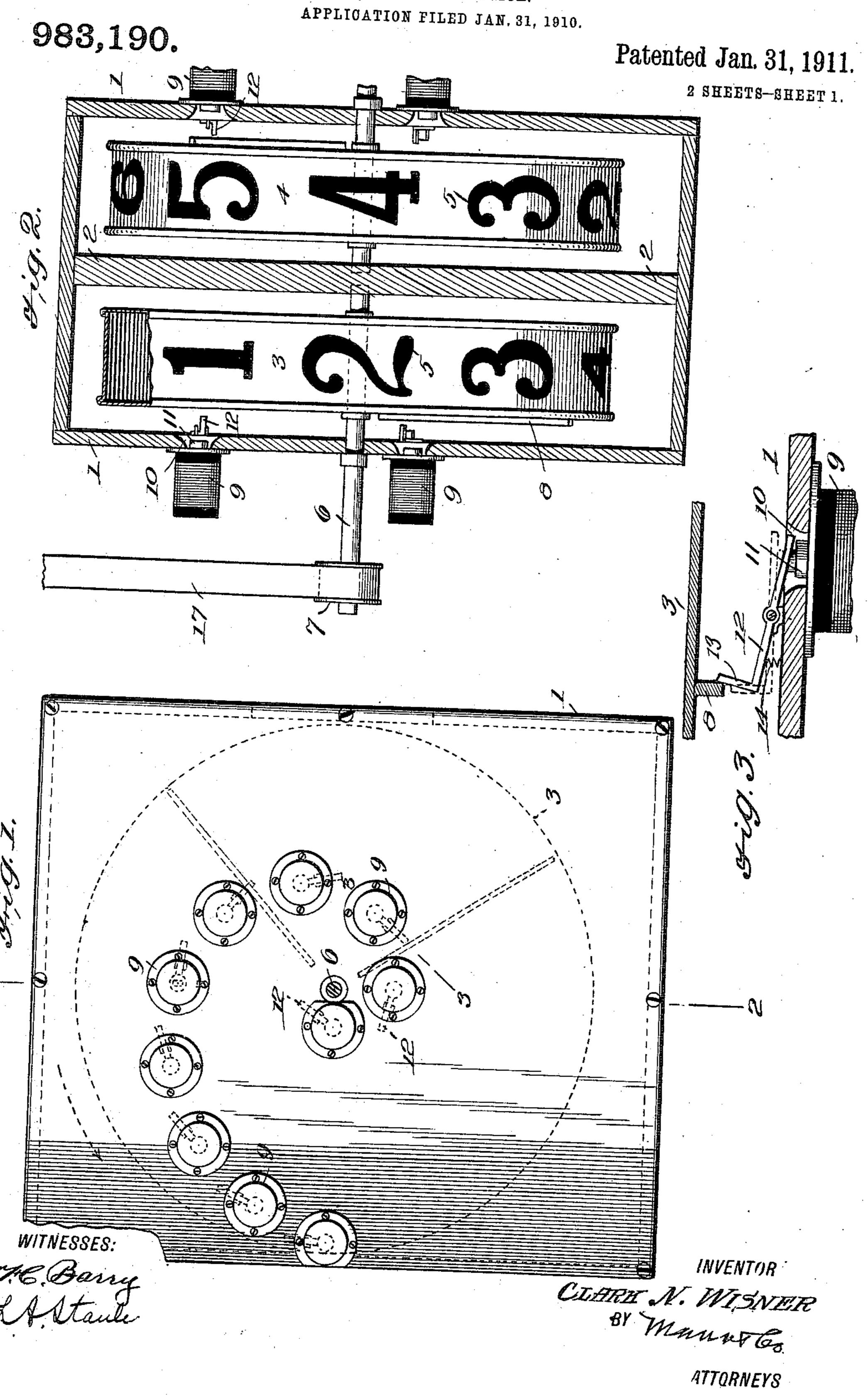
## C. N. WISNER. INDICATING DEVICE. PPLICATION FILED IAN 23 10

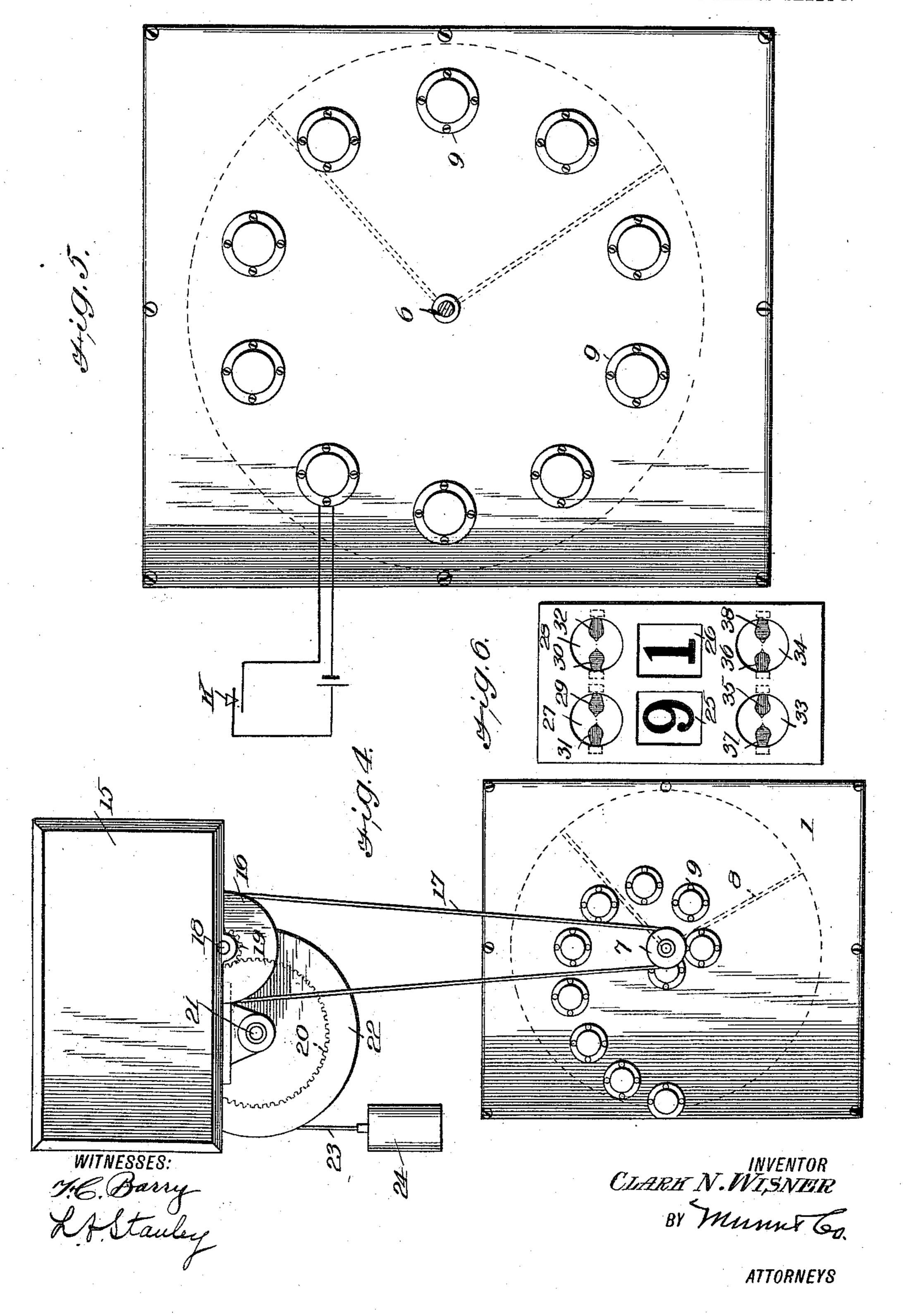


C. N. WISNER.
INDICATING DEVICE,
APPLICATION FILED JAN. 31, 1910.

983,190.

Patented Jan. 31, 1911.

2 SHEETS-SHEET 2.



## UNITED STATES PATENT OFFICE.

CLARK NOBLE WISNER, OF MEMPHIS, TENNESSEE.

## INDICATING DEVICE.

983,190.

Specification of Letters Patent.

Patented Jan. 31, 1911.

Application filed January 31, 1910. Serial No. 541,109.

To all whom it may concern:

citizen of the United States, and a resident of Memphis, in the county of Shelby and 5 State of Tennessee, have made certain new and useful Improvements in Indicating Devices, of which the following is a specification.

My invention relates to devices for indi-10 cating stock quotations, and it consists in the combinations, constructions and arrangements herein described and claimed.

An object of my invention is to provide a device which may be manipulated by an op-15 erator at a central station so as to display visible signs for indicating values and locations, thereby dispensing with the necessity of the customary ticker now used in most brokers' offices.

A further object of my invention is to provide a simple form of apparatus for accomplishing the above named results.

My invention is illustrated in the accompanying drawings forming part of this ap-25 plication in which similar reference characters indicate like parts in the several views, and in which—

Figure 1 is a side view of my indicating device, Fig. 2 is a section along the line  $2-\bar{2}$ 30 of Fig. 1, the indicating wheels being shown in full lines, Fig. 3 is a detail sectional view of the operating portion of the magnet, Fig. 4 is a view showing the driving mechanism, Fig. 5 is a view showing a modified form, 35 and Fig. 6 is a reduced front view of the

device. In carrying out my invention I provide a box or casing 1 which is divided by a partition 2 into two compartments, see Fig. 2. 40 In each of these compartments is pivotally mounted a wheel, such as that shown at 3 and 4. This wheel may be made of any suitable material but is preferably of light metal, such as sheet metal, as shown in 45 the figure. On the periphery of each wheel is a series of numbers 5, ranging from zero to nine. The construction of both wheels being the same, a description of one will suffice. The wheel 3 as shown in Fig. 2 is 50 mounted on a shaft 6 which is provided at its end with a pulley 7. The exterior portion of the wheel is provided with an outwardly projecting flange 8.

On the exterior of the casing 1 is mounted 55 a series of magnets 9, see Fig. 1, there being

ten of these magnets as shown in the figure. Be it known that I, Clark N. Wisner, a | The magnets may be arranged in an involute curve as shown in Fig. 1, or they may be arranged at equal distances from the shaft 6 as shown in Fig. 5. Each magnet is secured 60 to the outer side of the casing adjacent an opening 10, and the core 11 of the magnet projects into the opening. On the inside of the casing adjacent the opening 10 is pivotally mounted an armature 12 having an in- 65 wardly turned end 13, normally held by the spring 14 away from the flange 8 on the wheel 3, but adapted to be brought into the path of the flange 8 when the opposite end of the armature is attracted toward the pole- 70 piece 11. Each of these magnets is connected with its individual key K in the central station so that when the key is depressed the magnet will be energized, throwing the armature forward.

> The wheel is turned by means of the power device shown in Fig. 4. This consists of a casing 15 bearing a pulley 16 which is connected with the pulley 7 by means of a belt 17. The shaft 18 of the pulley 16 bears a 80 gear 19 meshing with a larger gear 20. The shaft 21 of the latter bears a large pulley 22 upon which is wound the cord 23 of a weight 24. It will be seen that the train of gears thus arranged will cause the wheel 3 85 to revolve when it is left free to move and that a short movement of the weight will cause a number of revolutions of the wheel.

The face of the indicating device is similar to that shown in Fig. 6. There are two 90 openings 25 and 26 for the figures on the number wheels. Above the openings 25 and 26 are the openings 27 and 28. The electric lamps 29 and 30 project into the openings and may be of a particular color such as red, 95 while the lamps 31 and 32 projecting toward the lamps 29 and 30 respectively, may be of another color, such as blue. A similar pair of openings 33 and 34 are provided with the blue lamps 35 and 36 and the red lamps 37 100 and 38.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. The driving train is wound up and the wheels are 105 set going, the central operator noting the quotations, presses the buttons or keys corresponding to these figures; thus in Fig. 6 the key 9 on one wheel and 1 on the other is depressed. The magnets corresponding with 110

these keys are operated and when the flange 8 comes into contact with the ends of the armatures the wheel is stopped with the figures 9 and 1 in position, thereby indicat-5 ing a value of 91. The different lights may be simultaneously operated so that, for instance, when the light 37 is lighted in connection with the figure 91 it indicates "March cotton at the New Orleans market is 91".

10 If the light 36 is flashed it indicates that "May cotton at New Orleans is 91". It is obvious that the other lights may be made to indicate quotations obtaining at other ports, as for instance, New York or Liver-

15 pool or different months. I have designated the colors as red and blue or they may obviously be any color to indicate a desired market, month, etc. As soon as the magnet circuit is broken the wheels begin to re-

20 volve again and they will revolve until the armature of the operator magnet strikes the stop flange. A plurality of these devices may be run from one key set made by connecting certain magnets having similar posi-

25 tions with the same key thereby bringing the same indicating numeral before the opening when the key is depressed.

I am aware that other forms of the device based upon the same general idea might be 30 made, but I consider as my own all such ! modifications as fall within the spirit and scope of the invention.

I claim:

1. An indicating device comprising a casing provided with an opening, indicating 35 wheels therein provided with numbers on their peripheries, a series of magnets secured to the exterior of said casing, individual armatures therefor, and a stop member carried by each wheel and adapted to be en- 40 gaged by said armatures for stopping the wheel in a predetermined position.

2. An indicating device comprising a casing provided with an opening, indicating wheels therein provided with numbers on 45 their peripheries, a series of magnets secured to the exterior of said casing, armatures pivotally mounted on the interior of said casing, a flange carried by each of said wheels and adapted to be engaged by said arma- 50 tures, power devices for rotating each of said wheels and an electric circuit connecting each magnet with an individual key for energizing the magnet to stop the wheel in a predetermined position.

## CLARK NOBLE WISNER.

Witnesses:

JAKE LEVY, W. H. TAYLOR.