F. McMANUS.

Lumber Register.

No. 55,327.

Patented June 5, 1866.

Fig: 1.

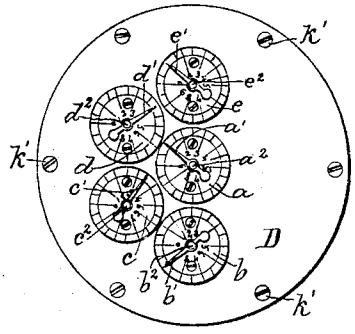


Fig: 2.

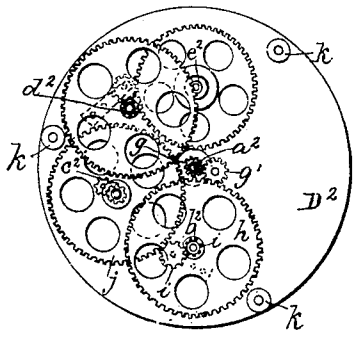


Fig: 3.

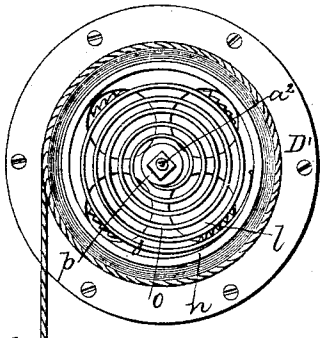


Fig: 4.

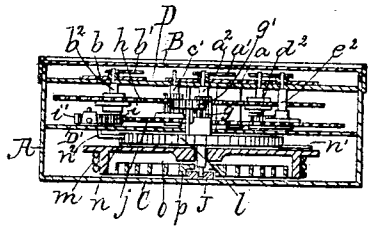


Fig: 5.

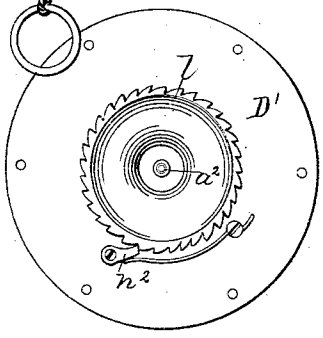
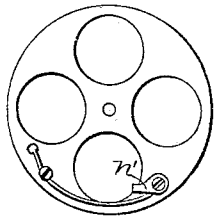


Fig: 6.



Witnesses.

Wm Freurn

Theo Tusch

Inventor

F McManus

R. Mumford

Attys

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

FRANCIS McMANUS, OF ELLENBURG CENTRE, NEW YORK.

IMPROVEMENT IN LUMBER-REGISTERS.

Specification forming part of Letters Patent No. **55,327**, dated June 5, 1866.

To all whom it may concern:

Be it known that I, FRANCIS MCMANUS, of Ellenburg Centre, in the county of Clinton and State of New York, have invented a new and Improved Lumber-Register; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a face view of this invention. Fig. 2 is a plan or top view of the registering mechanism when the dial-plate is removed. Fig. 3 is an inverted plan of the same when the bottom of the case has been removed. Fig. 4 is a vertical central section of the same. Fig. 5 is a bottom view of the registering mechanism when the barrel and spiral spring are removed. Fig. 6 is an inside or top view of the barrel.

Similar letters indicate like parts.

The object of this invention is a simple, cheap, and compact device, which is so arranged that by pulling a cord a number of index-hands are set in motion, which, by sweeping over suitable registering-dials, indicate the number of feet for which the cord has been drawn, said cord being so applied that it is carried back, each time it is drawn out to its original position, by the action of a spiral spring. By applying the cord repeatedly the length, width, or number of superficial feet of a certain number of boards or of other articles can be ascertained with ease and facility.

A represents a case made of sheet-brass or other suitable material, and provided with a transparent top, B, and solid opaque bottom C, both of which are so arranged that they can be removed in order to get access to the interior. Under the transparent top is a dial-plate, D, which is provided with five (more or less) dials, *a b c d e*, each marked with figures from 1 to 10, and on these dials move the index-hands a' b' c' d' e'. The index-hand a' is intended to show the units, and it is mounted on the central axis, a^2, which has its bearings at one end in the dial-plate and at the other in a square socket or step, *f*, secured to the bottom of the case A. A pinion, *g*, mounted on the central axis, a^2, gears in a small cog-wheel, g', which meshes into a cog-wheel, *h*, on the axis b^2 of the second dial, *b*, the pinion *g* and cog-wheel *b* being so proportioned that the axis a^2 has to make ten revolutions to produce one revolution of the axis b^2. From the axis b^2 the motion is transmitted to the axis c^2 by pinion *i* and cog-wheels i' *j*, and in the same manner the motion from the axis c^2 is transmitted to the axis d^2, and thence to the axis e^2, by suitable pinions and cog-wheels, the motion of each subsequent axis being so regulated that the same makes one revolution to each ten revolutions of the previous axis. If the index on the axis a^2 indicates units, therefore the index on the axis b^2 will indicate tens, that on the axis c^2 hundreds, that on the axis d^2 thousands, and that on the axis e^2 ten thousands, and it is obvious that the number of dials can be still further increased if desired.

The bearings of the axes b^2 c^2 d^2 e^2 are at one end in the dial-plate D, and at the opposite end in horizontal division-plate D′, which connects with the dial-plate by studs *k* and screws *k*′. The axis a^2 passes freely through this division-plate, and it bears a ratchet-wheel, *l*, which is mounted on it below the plate D′, as shown in Figs. 3 and 4. A cord, *m*, which winds on a barrel, *n*, and the end of which extends through a suitable slot in the case A, serves to impart motion to the ratchet-wheel, and through it to the entire registering mechanism. The barrel *n* turns loosely on the axis a^2, and it is provided with a pawl, n', which catches into the teeth of the ratchet-wheel, so that by pulling the cord whereby the barrel is turned in the direction of the arrow marked thereon in Fig. 3 the ratchet-wheel is compelled to turn with said barrel, but a stop-pawl, n^2, which is secured to the division-plate D′, prevents the ratchet-wheel from turning back. The barrel *n*, after having been rotated by pulling the cord, is carried back to its original position by the action of a spiral spring, *o*, the outer end of which is connected to said barrel, whereas its inner end is fastened to a cap, *p*, that fits over the stationary socket or stop *f*, as clearly shown in Fig. 4. By this stop the cap is prevented from turning, and if the cord is pulled and the barrel rotates in the direction of the arrow marked on it in Fig. 3 the spring is wound up. On releasing the cord the spring unwinds and carries the barrel back, thereby taking in the cord. While the barrel is going back the pawl n' glides over

the teeth of the ratchet-wheel, which, being prevented from turning backward by the pawl n^2, remains stationary.

The barrel n is so arranged that by pulling the cord ten inches the first index will turn round once, and the figures on the dials are so regulated that they show the number of superficial feet in a board or pile of boards; but it is obvious that said figures can be arranged in any other desirable manner for other articles besides lumber, and the proportion of the disks may be changed to suit circumstances.

I do not wish to confine myself, therefore, to any particular number of dials, neither do I confine myself to any particular proportion of the same, but reserve the right to change the same as circumstances may make desirable.

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

The barrel n, with pawls n' n^2, ratchet-wheel l, and suitable train of wheels connecting the axes a^2 b^2 c^2 d^2 e^2, &c., in combination with the cord m, spring o, and stationary cap p, constructed and operating substantially as and for the purpose specified.

F. McMANUS.

Witnesses:
I. R. CARPENTER,
RUSSELL HUTCHINS.