(No Model.)

J. B. PRICE.

COMBINED PAPER WEIGHT, LETTER SCALE, AND CALENDAR.

No. 476,067. Patented May 31, 1892.

Fig. 1.

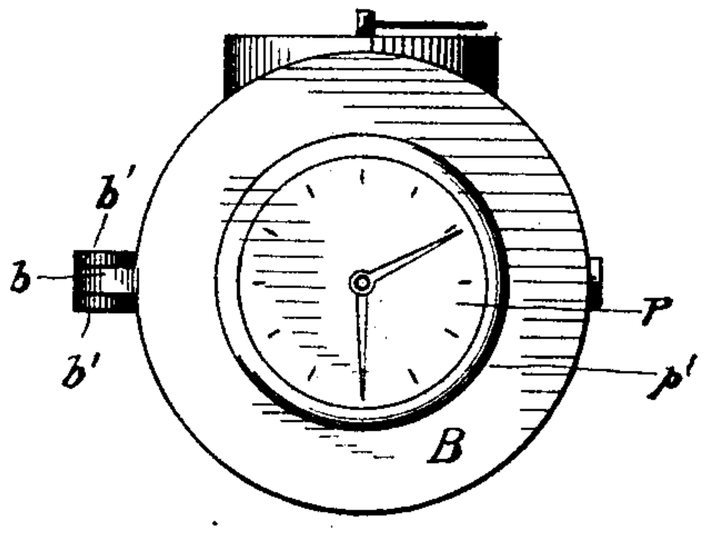


Fig. 2.

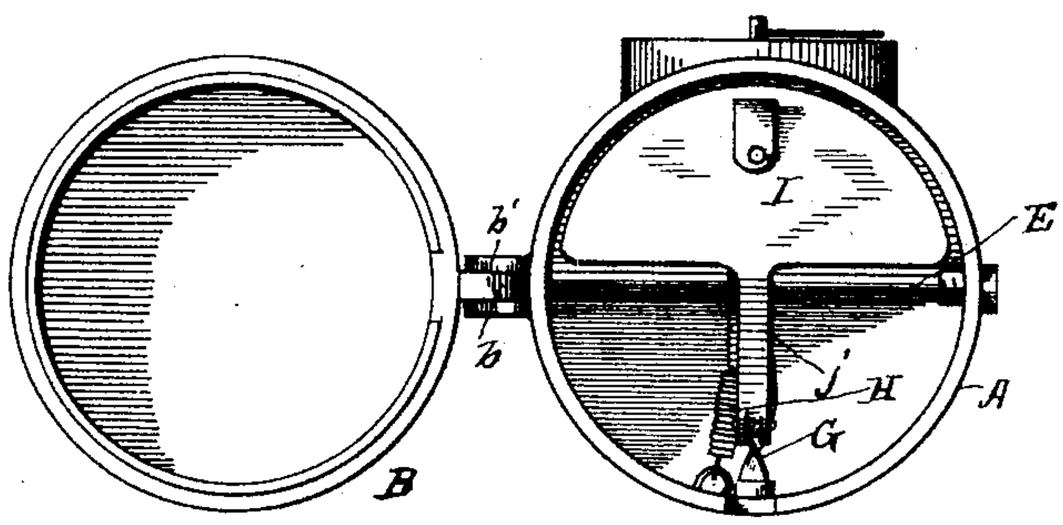
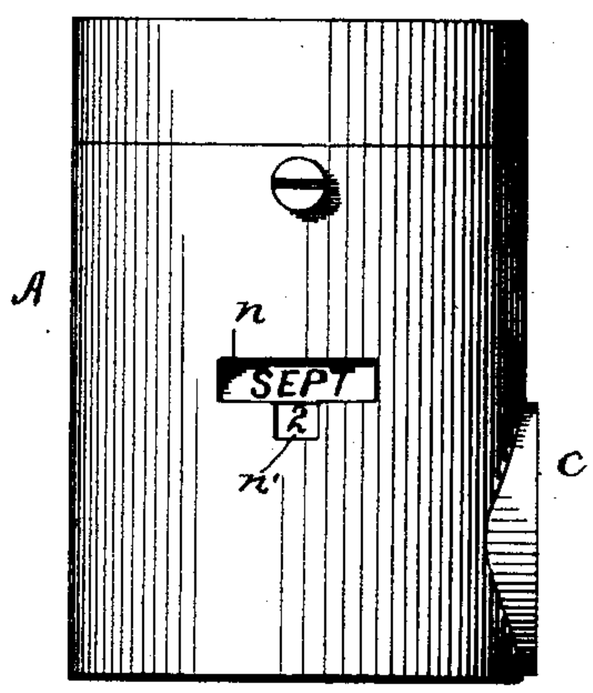


Fig. 4.

Fig. 3.



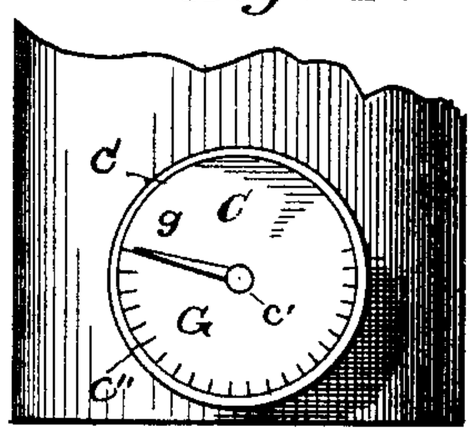
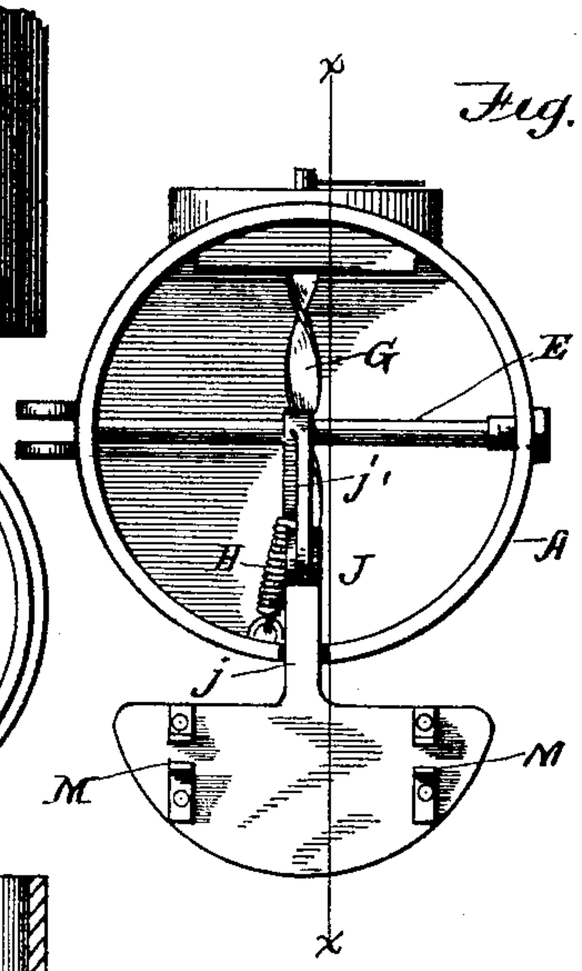


Fig. 5.



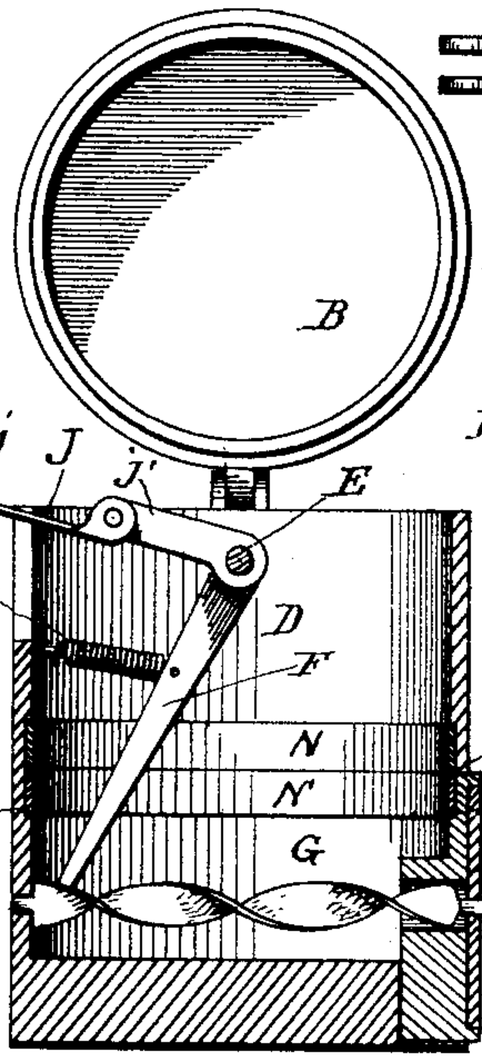


Fig 6

Witnesses

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COMBINED PAPER-WEIGHT, LETTER-SCALE, AND CALENDAR.

SPECIFICATION forming part of Letters Patent No. 476,067, dated May 31, 1892.

Application filed March 30, 1892. Serial No. 427,114. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. PRICE, a citizen of the United States, residing at Wollaston, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improvements in a Combined Paper-Weight, Letter-Scale, and Calendar; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to a combined paper-weight, letter-scale, calendar, and time-piece; and the object in view is to combine in a single cheap implement or article for use on an office-desk a number of devices which are compactly and simply arranged within a single case or shell, so that the several articles are always at hand for immediate use.

With these ends in view the invention consists of a small shell or case having a movable cover, a foldable arm mounted on a rock-shaft and having a scale-pan on one section of the arm, which is adapted to be folded within the case, and the other section of the arm being rigid with the rock-shaft, which carries a spring-controlled pendant arranged to impart axial movement to an index-shaft, which carries a pointer adapted to move around a dial or chart on the case or shell.

The invention further consists of a compound implement comprising a shell or case, a lid or cover therefor having a time-piece which is visible from the outside when said cover is closed, a weighing mechanism within the case and having a scale-pan carried by an arm which is adapted to be unfolded to extend beyond the shell and to be folded within the same, and revoluble calendar-rings seated in the cylindrical shell and adapted to be exposed through a slot or slots in said shell, the latter being quite small and serving as a paper-weight, which may be finished or ornamented to have an attractive appearance.

The invention further consists in the combination and construction of parts which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a plan view of my device, showing the lid closed. Fig. 2 is a plan view with the cover opened, showing the balance-arm folded within the receptacle. Fig. 3 is a front view showing the lid closed and illustrating the calendar rings or bands therein. Fig. 4 is an elevation of a part of the shell or casing, showing the dial and index of the weighing mechanism. Fig. 5 is a plan view of the device with the lid opened and the balance-arm unfolded or projected beyond the shell or casing; and Fig. 6 is a vertical sectional view with the parts in the position shown in Fig. 5, the plane of the section being indicated by the line $x\,x$ of said Fig. 5.

Like letters of reference denote corresponding parts in the several figures of the drawings.

A designates the casing or shell of my compound implement, which is adapted for service, especially on an office-desk, as a paper-weight. The shell or casing is preferably made cylindrical in form, although this is not essential, as any other shape may answer the purpose. In fact, the shell may be made of any preferable shape, and ornamented or finished in any suitable style. The lower end of the shell is closed, while the upper end thereof is open and provided with a hinged lid or cover B, the lid having a rigid lug b, which is pivoted between rigid ears b' on the outside of the shell, so that the lid folds or opens outwardly. On its outer side, near the lower part, is cast an integral circular boss c, having a central opening c' and provided with a seat c'', in which is fitted the dial-plate C, suitably inscribed to indicate the weight of the letter or article placed on the weighing mechanism D, which is housed or inclosed within the shell or case A. The weighing mechanism has a rock-shaft E, which is suitably journaled or supported in the walls of the shell or casing near the upper open end thereof, and from the rock-shaft depends an arm F, which is rigid with the shaft. This pendant F is adapted to contact or engage with an axially-turning shaft G, journaled in the walls of the casing near the bottom thereof and arranged at right angles to the rock-shaft, one end of such axially-turning shaft extending through the opening c' in the dial C and carrying the index or pointer g, which is adapted to traverse the dial. This shaft G is constructed in a manner to cause

it to rotate when the pendant F is moved by the rock-shaft along and in contact with the surface of the shaft, and one means of effecting this axial movement of the shaft consists in twisting the shaft into spiral form in the manner shown, although other equivalent constructions may be employed—as, for instance, a spiral groove in a solid shaft, in which works a roller on the pendant.

The shafts D G and the pendant are normally held in such positions that the index points to "zero" on the dial by means of a coiled spring H, one end of which is fastened to the inside of the case or shell and the other end is connected to the pendant F at a point between its ends. (See Fig. 6.)

I′ is the scale-pan, which is preferably made of a single piece of metal with a segmental edge and of such size that it will lie within the upper part of the shell or casing A when the device is folded, and this scale-pan is carried by a foldable arm J, consisting of two sections *j j′*, which are pivoted together at their approximate ends, and one section *j* has a lug or ear *k* at its pivoted end, which is adapted to bear against the lower side of the other section *j′* when the arm is unfolded, so that the two sections are held in line with each other, as shown in Fig. 6. The inner member *j* of the foldable arm is rigidly fastened to the rock-shaft and the other or outer section *j′* of the arm is rigid with the scale-pan, or it may be made integral therewith.

The upper part of the receptacle or case A is provided with a vertical slot *l*, which opens through the upper edge of said case, and when the scale pan and arm are depressed by the weight of a letter or other article placed on the scale-pan the arm-section *j* is depressed into the vertical slot.

To adapt the scale-pan to securely hold a letter or other desired article, which because of the small size of the pan cannot be laid thereon, I provide the pan with vertical clips M, which are made of yielding fingers arranged in pairs and rigidly fastened to the pan, the pairs of fingers being so arranged that the openings between the fingers are in line, so that a letter can be placed on edge between the fingers and held securely in place thereby.

In the casing or shell A is provided two observation-slots *n n′*, which are preferably of different sizes and are connected together, and through these slots are visible the inscriptions on the calendar rings or bands N N′, arranged within the annulus or shell A and supported on suitable seats n^3 therein. One of these rings or bands is inscribed with letters or words representing the calendar months of a year, and the other band has the numerals representing the days of the month, and said bands are adapted for independent adjustment to bring the proper month and day thereof opposite to the observation-slots, so as to be visible through the same. The hinged lid or cover B of the shell or case is recessed or hollowed to provide a chamber *p*, in which is fitted and secured a clock or watch movement, (represented at P,) the same being covered by a bezel *p′*.

The entire device forms a very convenient and handy article around and on the desk, as it may serve as a paper-weight. The rings or bands can be adjusted to indicate the days and months of the year, and the time-piece will indicate the hour. To weigh a letter, the lid is raised and the arm is unfolded to project the scale-pan beyond the shell and the letter placed on edge on the pan between the clips or fingers thereon. The weight of the letter causes the pan to descend and the arm to fit in the slot, and the rock-shaft is thus turned to cause the pendant to rotate the shaft G and move the pointer to the proper point on the dial to indicate the weight of the letter or article. The arm and pan can be folded within the shell A and the lid or cover closed to conceal all the parts of the weighing mechanism and protect the same from injury.

It is evident that modifications in the mechanism herein shown and described as an embodiment of my invention can be made by the skillful mechanic; and,

Without limiting myself to the exact construction herein shown and described, what I claim as new is—

1. The combination, with a case or shell, of a weighing mechanism housed therein and having a scale-pan adapted to be unfolded beyond the shell or case when in operative position, substantially as described.

2. The combination, with a suitable shell or case, of a weighing mechanism housed therein and having a foldable arm which carries a scale-pan adapted to be projected or unfolded beyond the case or shell when in operative position, said arm and its attached pan being foldable wholly within the shell or case, as set forth.

3. The combination, with a suitable shell or case, of an an axially-turning shaft carrying an index, a rock-shaft having means to actuate the aforesaid shaft, and a scale-pan carried by the rock-shaft and adapted to be folded and unfolded within the shell or case, substantially as described.

4. The combination, with a suitable shell or case, of an index-shaft, a rock-shaft having means to actuate the index-shaft, and a foldable arm connected to the rock-shaft and carrying the scale-pan, as and for the purpose described.

5. The combination, with a suitable shell or case, of an axially-turning shaft having an index, a spring-controlled rock-shaft having a pendant which engages with the index-shaft, and a foldable arm supported by the rock-shaft and carrying a scale-pan, substantially as described.

6. The combination, with a suitable shell or

case, of a spiral index-shaft having a pointer, a rock-shaft carrying a pendant, arranged to contact with the index-shaft, a spring, and a foldable support for the scale-pan, substantially as described.

7. The combination, with a suitable shell or case, of a weighing mechanism housed within the case and having its scale-pan provided with clips for retaining the article on said pan, substantially as described.

8. The combination, with a suitable shell or case having a cover, of an index-shaft having a pointer, a rock-shaft having means to actuate the index-shaft, a foldable support on the rock-shaft, and a scale-pan carried by the support and having the letter-retaining clips, all combined and arranged substantially as described.

9. As an article of manufacture, a compound implement comprising a slotted case having a cover and the dial, the bands or rings seated within the case opposite the slots therein, the index-shaft, a rock-shaft having means to actuate the index-shaft, and a foldable support connected to the rock-shaft and carrying a scale-pan, substantially as described.

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

JOHN B. PRICE.

Witnesses:

CHAS. F. THAYER,

HENRY J. THAYER.