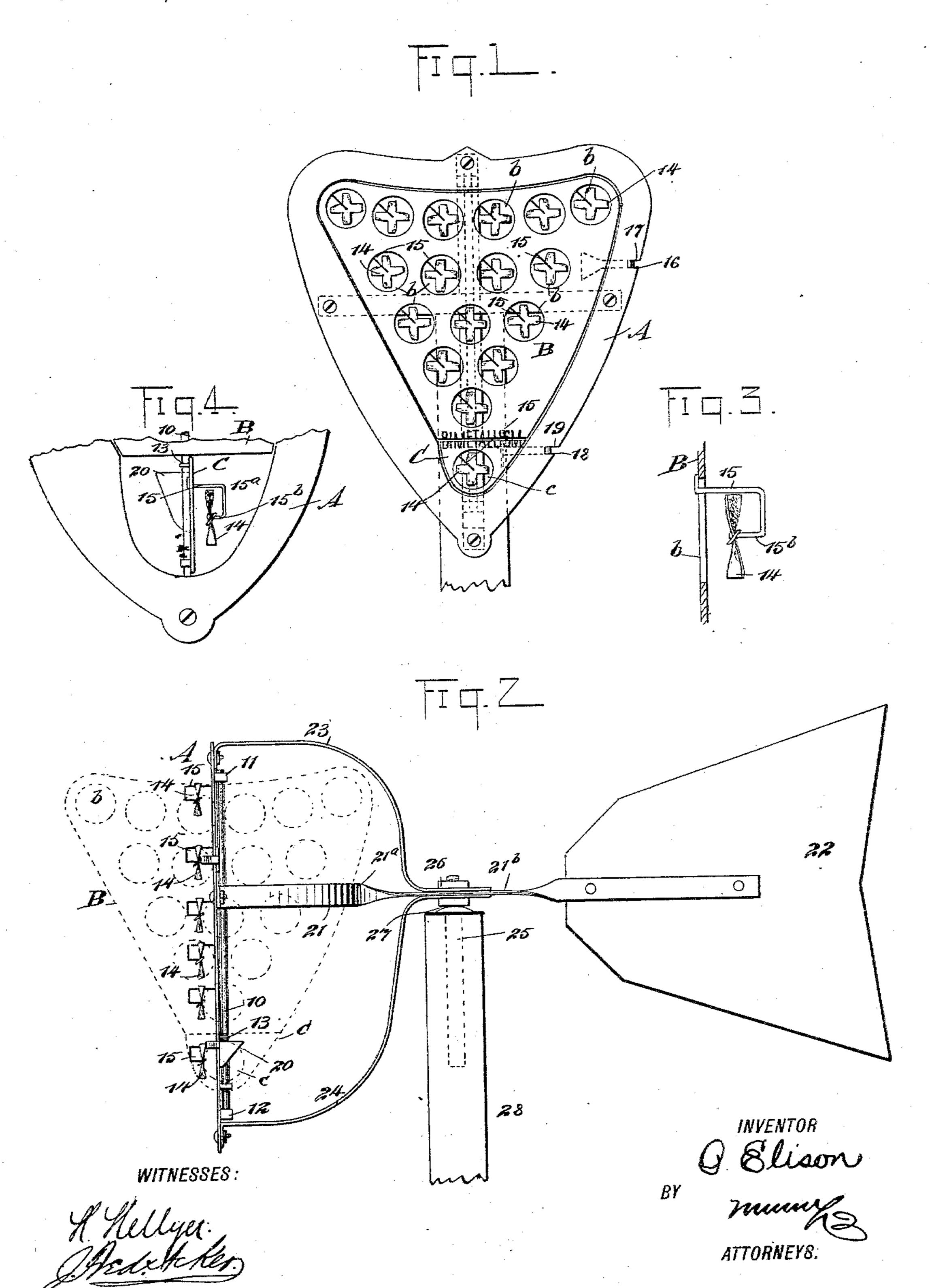
## O. ELISON

DEVICE FOR DEMONSTRATING FINANCIAL PROBLEMS.

No. 571,613.

Patented Nov. 17, 1896.



## United States Patent Office.

OLIVER ELISON, OF CONCORD, NEBRASKA.

## DEVICE FOR DEMONSTRATING FINANCIAL PROBLEMS.

SPECIFICATION forming part of Letters Patent No. 571,613, dated November 17, 1896.

Application filed August 12, 1896. Serial No. 602,576. (No model.)

To all whom it may concern:

Be it known that I, OLIVER ELISON, of Concord, in the county of Dixon and State of Nebraska, have invented a new and Improved Device for Demonstrating Financial Problems, of which the following is a full, clear,

and exact description.

The object of my invention is to construct a device by means of which financial problems may be demonstrated in a lucid manner, the device being capable of illustrating what "bimetallism" means, what is meant by a "ratio," what is meant by "silver monometallism" and "gold monometallism," "silver demonetized" and "remonetized," "gold demonetized" and "remonetized," together with "parity" or "par" as applied to the circulation of money, the device being exceedingly simple, durable, and economic in its construction and operated through the medium of the wind in like manner to a wind-wheel.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth,

25 and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the device. Fig. 2 is a side elevation thereof. Fig. 3 is a sectional view through one of the plates, illustrating the wind-wheel in position thereon; and Fig. 4 is a detail view of the lower plate representing gold, the said plate

being in the wind.

In carrying out the invention a frame A is constructed in skeleton form and of any desired shape or material. Within the said 40 frame a plate B is located, which practically fills up the major portion of the opening in the frame, and the remaining portion of the opening may be closed by a second and smaller plate C, which is usually at the bot-45 tom portion of the frame. In the larger or silver plate B sixteen openings b are made, the said openings being usually circular, and in the smaller or gold plate C a single opening c is produced. At the back of the frame 50 a vertical shaft 10 is centrally located, and this shaft is journaled in a suitable bearing 11 at the top of the frame and in a second

bearing 12 at the bottom of the frame, the latter bearing being closed at its lower end to form a support for the corresponding portion of the shaft, and the silver or larger plate B is secured to this shaft so that the plate may be carried at an angle to the frame, if desired. The smaller or gold plate C is mounted to turn on the shaft 10, and one or 60 more of its bearings 13 are made to enter grooves in the shaft in order to prevent the lower or gold plate C from sagging or working out of vertical position.

Over each opening in both the silver and 65 the gold plates B and C a propeller-like wheel 14 is located, the wheels being at the front of the plates and are removed some distance from their front faces. The wheels on the plate B are of silver color and the 70 wheel on the plate C is of gold color. The centers of these wheels center the openings over which they are located and the said wheels are smaller than the said openings.

Each wheel 14 is preferably supported 75 through the medium of a hanger 15, and these hangers, which are of stout wire or like material, are secured at their rear ends on the back of the plates to which they belong by solder or other means and are located at or near the 80 upper edges of the openings. Each hanger is carried horizontally outward through and beyond the opening at which it is placed, as shown in Fig. 3, and is then bent upon itself to form a vertical downwardly-extending 85 member 15° and is again bent to form a rearwardly horizontally extending member 15°, terminating in a head, the latter centering the opening, and the propeller-like wheels are mounted to revolve on the rearwardly-extend- 90 ing members 15<sup>b</sup> of the hangers. The wheels 14 may be stamped or shaped to turn in the same direction, or sundry of them may be so shaped as to turn in one direction, others turning in an opposite direction, and these 95 wheels are also preferably colored, those representing silver being of a silver color and the wheel representing gold being of a gold color. These wheels are turned or revolved by the action of the wind when the plates carrying 100 them are made to face the wind.

A latch 16 is attached to the larger or silver plate B, and when this plate is to be held in the same plane as the frame the said latch

enters a keeper 17, formed in or upon the frame, and a similar latch 18 is provided for the smaller or gold plate, which under like circumstances enters a keeper 19 in or upon 5 the frame. The word "bimetallism" is printed partially upon the silver and partially

upon the gold plate, as shown.

The lower or gold plate C is provided with a wing 20, which is at a right angle to the 10 plate and is located on the back, and this plate may form a portion or continuation of the latch 18. The frame is provided with arms 21, secured to the back at each side, and these arms are arched toward the center, and 15 where they meet the arms are soldered or otherwise securely fastened together, as shown at 21° in Fig. 2. The two arms are then carried horizontally and rearwardly from the arch, being bent upon themselves adjacent to 20 the arch to form a flat surface 21b, and the said arms are again bent upon themselves so that their upper and lower edges will be vertical and the two arms receive between them a vane 22, as shown in Fig. 2.

25 An upper and a lower arched arm 23 and 24 are likewise provided, and the upper and lower arms are secured to the corresponding portions of the central back portion of the frame and are made to engage one with the up-30 per and the other with the lower face of the flat portion 21<sup>b</sup> of the side arms 21. At this point all the arms are connected through the medium of a vertical shaft 25 and suitable lock and jam nuts 26 and 27, and the lower end of 35 the shaft 25 is mounted to revolve in a post 28 or the equivalent thereof, so that the entire device may follow the direction of the wind; but the shaft 25 may be otherwise mounted and suitable devices may be employed to prevent

40 the shaft leaving its support.

When the silver or upper plate B is loosened by detaching its latch from the frame, the said plate will turn so as to be at a right angle to the frame and in the wind, its latch 16 en-45 gaging with either the upper or the lower supporting arm 23 or 24, preventing the plate B from moving beyond a center line, and when the smaller plate C has its latch released from the frame the wind will carry it back at 50 a right angle to the frame and it will be prevented from passing the central line by the action of the wind on the wing 20, which will be at that side of the plate in direction of which it would naturally be carried without 55 suitable resistance to the wind, and when the plates are brought up into the wind the wheels will be silent, since the wind will have no control over them.

The value of money is proportionate to the 60 duty it performs as a purchasing agent, and gold and silver circulate at par or at a parity when legally given an equal chance. The free circulation of the wheels of the two plates represents the free circulation of money and 65 the parity of gold and silver as a purchasing

simulating the law. When both plates are brought into such position that the wind will act equally upon the wheels, each such position of the device represents the application 70 of bimetallism, both gold and silver circulating from the same source and for the same purpose. When the silver-plate is brought into the wind, the device represents gold monometallism, since the wheels on the silver-75 plate are silenced and silver is discarded or demonetized. By bringing the silver-plate again before the wind the device will represent how silver is remonetized, and a parallel demonstration is obtained with reference to 80 gold when the smaller plate C, representing gold circulation, is manipulated in the same manner as the silver-plate B.

The sixteen circular openings in the larger or silver plate B and the single opening in 85 the smaller or gold plate C, together with the wheels over said openings, represent a ratio of sixteen to one, the silver in the silver dollar weighing sixteen times as much as the gold in the gold dollar. The ratio illustrated, 90 however, may be varied without departing

from the spirit of the invention.

The stamp or shape of the wheels is designed to represent the government-stamp or coin, the material in or the color of the wheels 95 represents the substance upon which the monetary government stamp is placed, and the breeze represents the authority or legal tender, while the vane which controls the movement of the entire device represents the 100 government controlling the money. As the government controls legal tender so the vane controls the wheels in a breeze.

Having thus described my invention, I claim as new and desire to secure by Letters 105

Patent—

1. A device for demonstrating financial problems, consisting of a frame having independent pivoted members, openings in the said members, and wheels carried by the piv- 110 oted members shaped to be acted upon by the wind and located over the said openings.

as and for the purpose set forth.

2. A device for demonstrating financial problems, consisting of a frame, plates inde-115 pendently pivoted in the said frame, the said plates being provided with a predetermined number of openings, wind-wheels carried by the plates and located over the openings at the outer face of the plates, and latches for 120 the said plates, whereby they may be held in substantially the same plane as that of the front of the frame, or assume a position at an angle to the frame, as and for the purpose set forth.

3. In a device for demonstrating financial problems, a pivoted frame, plates pivoted in the said frame, each of the said plates being provided with openings, the openings in one plate being of greater number than those in 130 the second plate, and wind-wheels carried by medium, the breeze actuating the wheels the plates and supported over the said open-

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ings at a point beyond the same, and locking devices for the said plates, substantially as

and for the purpose specified.

4. In a device for demonstrating financial problems, a pivoted frame, plates pivoted in the said frame, each of the said plates being provided with openings, the openings in one plate being of greater number than those in the second plate, wind-wheels carried by the plates and supported over the said openings at a point beyond the same, locking devices for the said plates, and means, substantially as described, for maintaining the plates at a right angle to the frame when their locking devices are released from their keepers, substantially as and for the purpose set forth.

5. In a device for demonstrating financial problems, a frame, plates pivoted in the said frame, one of the said plates being provided with sixteen openings and the other with a single opening, and wind-wheels held to revolve respectively one opposite each opening in each plate the wind-wheels being carried by the plates, as and for the purpose set forth.

6. In a device for demonstrating financial

problems, a frame, plates pivoted in the said frame, one of the said plates being provided with sixteen openings and the other with a single opening, a wind-wheel held to revolve opposite each opening in each plate said 30 wind-wheels being supported by the plates, locking devices for each plate, stops for the said plates, and a pivoted support for the frame, as and for the purpose specified.

7. In a device for demonstrating financial 35 problems, a plate having openings therein, hangers secured to one face of the plate, extending through said openings beyond the opposite face, the hangers being thence bent at an angle to their attached members and 40 finally in direction of the openings to which they belong, centering the latter, and windwheels mounted to turn on the centering members of the said hangers, as and for the purpose set forth.

OLIVER ELISON.

Witnesses:

GEORGE W. KEMP, R. O. MITCHELTSEN.