C. Liebrich,

Toy Game.

No. 20,075. Patented Apr. 27, 1858.

Fig. 3.

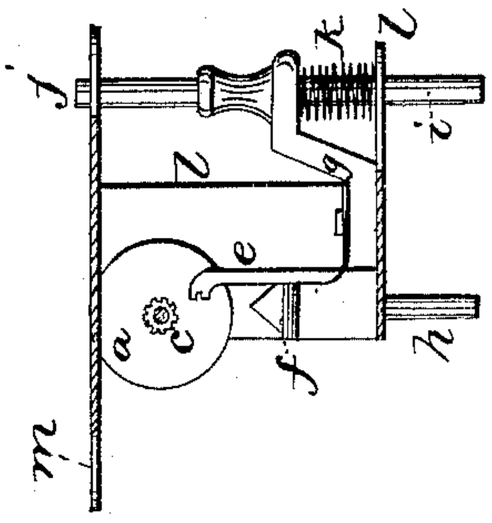


Fig. 5.

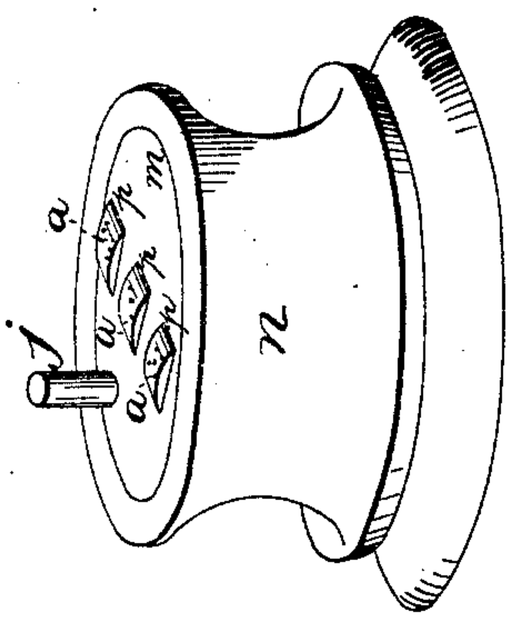


Fig. 2.

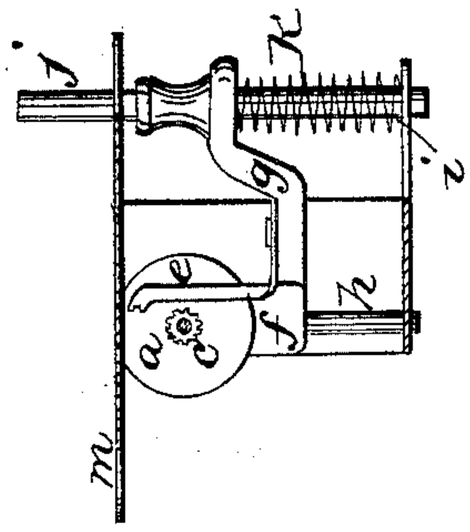


Fig. 4.

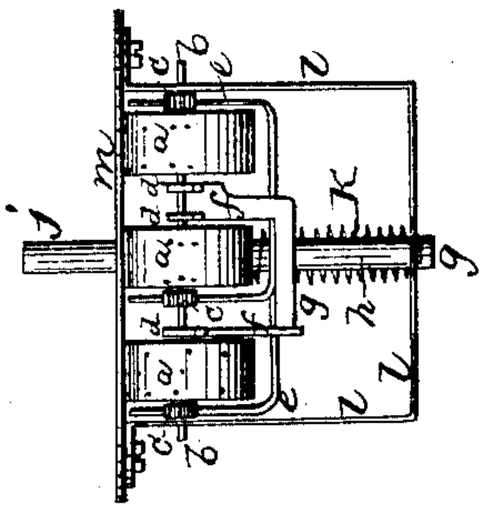
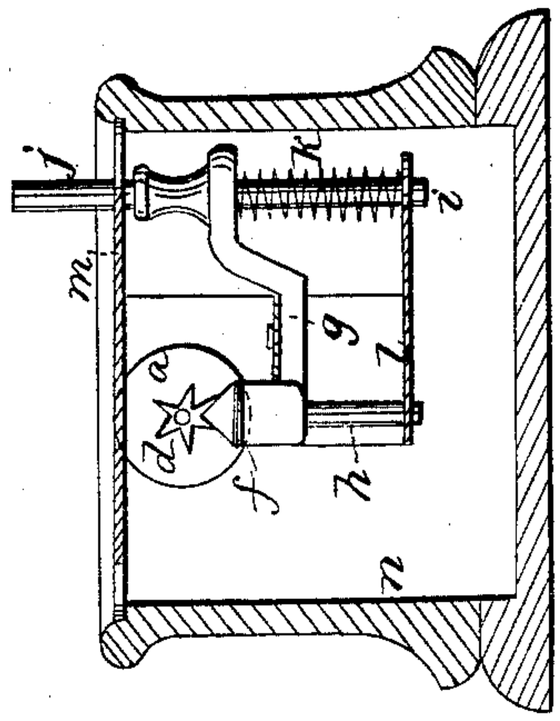


Fig. 1.



UNITED STATES PATENT OFFICE.

CONRAD LIEBRICH, OF PHILADELPHIA, PENNSYLVANIA.

TOY.

Specification of Letters Patent No. 20,075, dated April 27, 1858.

To all whom it may concern:

Be it known that I, CONRAD LIEBRICH, of Philadelphia city, State of Pennsylvania, have invented a new and useful Improvement in Toys; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a vertical section through the apparatus; Figs. 2, 3 and 4 are vertical sections through a detached portion of the device; Fig. 5 is a perspective view of the whole apparatus.

The nature of this invention consists in arranging certain numbers, letters, words or other signs upon two, three or more disks, in such a way that one of these designations upon each of the disks may be visible through a slot in a covering plate; the three numbers, letters, words or signs thus simultaneously displayed to convey a certain meaning.

The nature of this invention further consists in providing means for changing the relative position of the three disks by imparting motion to part of the apparatus, the working parts of the apparatus however being such that the change in the relative position of the three disks will be altogether accidental.

The device as represented by the annexed drawings consists of three disks *a*, *a*, *a*, which are free to turn upon a shaft *b*, entirely independent of each other. Each of the disks is provided with a toothed or cog wheel *c* upon one and a ratchet wheel *d* upon the other side. Toothed prongs *e*, *e*, *e*, one for each cogwheel, and stops *f*, *f*, intended to take into the ratchet wheels are attached to a crosspiece *g* that is provided with guide pins *h*, *i*, *j*, and is constantly pressed upward by means of a spiral spring *k*. The shaft *b* has its bearings in a frame *l* which has also two holes for the guide pins *h*, *i* to pass through. The upper portion *j* of the guide pin *i* passes through a hole in a covering plate *m* which latter together with box *n* shuts out from view the working parts of the apparatus. Only the top of the pin *j* projects above the plate *m* and the highest portion of the circumference of each of the disks is visible through the three slots *p*, *p*, *p*, in plate *m*.

On depressing the pin *j* by the hand of the operator, the stops *f*, *f*, descend from between the teeth of the ratchet wheels and the prongs take into the teeth of the cogwheels and also descend below the cogwheels leaving the disks free to revolve around the shaft *b*, with the momentum that has been imparted to them by the passage of the prongs along the teeth of the cogwheels. This momentum will of course never be exactly equal in all the three disks and they will always move with somewhat different velocities. By the time the pin *j* is freed from the pressure of the hand of the operator, the spiral spring causes the crosspiece *g* to fly back, the prongs again pass the teeth of the cogwheels reversing the motion of the disks and the stops finally take into the teeth of the ratchet wheels. The three disks will then be at a standstill and their relative position will be different from what it was before pin *j* was operated upon.

The circumferences of the three disks are marked so as to represent the six numbers of dice upon each disk and it will be understood from the above description that each operation of the pin *j* will produce a change in the relative position of the dice numbers, the nature of which change will be a matter of accident.

As each ratchet wheel is provided with as many teeth as there are different numbers upon the circumference of the disk and as the spaces between the teeth of the ratchet wheel correspond with the spaces on the circumference where the numbers are marked upon—it will be perceived that whenever the stops have taken into the ratchet wheels, three of those numbers will be displayed through the slots of the covering plate.

What I claim in the above and desire to secure by Letters Patent is:

Arranging certain numbers, letters, words or other signs upon two, three or more disks, and combining them with certain devices for setting the disks in motion and stopping them in such a way that after each stoppage the relative position of the disks shall be changed, so as to show a different relative position of those numbers, letters, words or other signs upon the circumferences of the disks, and arranging the whole in such a manner that the nature of the change in the relative position of the disks after each stoppage will be a matter of accident as herein set forth.

CONRAD LIEBRICH. [L. S.]

Witnesses:

M. C. GRITZNER,

P. NENNING.