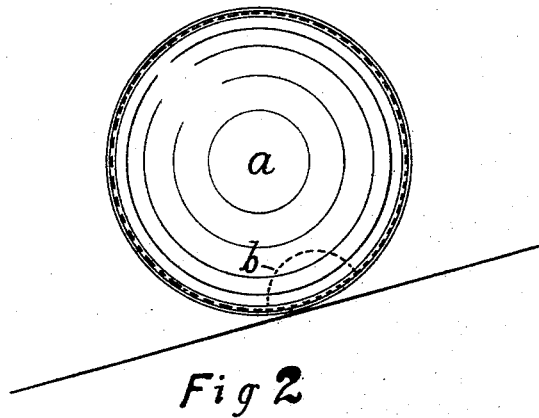
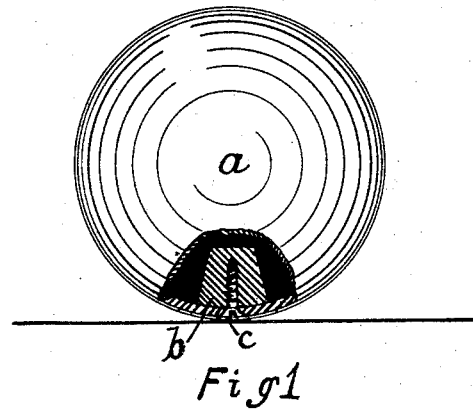


(No Model.)

C. E. GOODSPEED.
LOADED TOY BALL.

No. 454,544.

Patented June 23, 1891.



Witnesses
Anton Langner
Fred Jackson.

Inventor
Charles E. Goodspeed
By his Attorney Wm. Zimmerman

UNITED STATES PATENT OFFICE.

CHARLES E. GOODSPEED, OF CHICAGO, ILLINOIS.

LOADED TOY BALL.

SPECIFICATION forming part of Letters Patent No. 454,544, dated June 23, 1891.

Application filed February 24, 1891. Serial No. 382,420. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. GOODSPEED, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Loaded Toy Balls, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof and in which—

Figure 1 shows my improved toy ball in perspective on a level surface, with a fragment thereof broken out of its shell so as to expose the interior part provided with a weight, which said weight is also shown in section. Fig. 2 shows the same in perspective on an inclined plane, with its interior surface and weight thereon indicated in dotted lines.

Like letters refer to like parts.

The object of my invention is to produce a toy in the form of a ball made of a light shell which is loaded on its interior surface at some point with a fixed weight, whereby peculiar and interesting motions not possible in other balls may be displayed which will be both interesting and instructive, as well as amusing, especially so because the construction is entirely invisible.

To attain said desired end I construct a spherical shell *a* of any light material which may be suitable for the purpose, as wood, celluloid, &c., and attach to the interior sur-

face of the shell at any point a weight *b*, preferably a small one of heavy material, as lead, fastened by any well-known means, as a suitable cement or a screw *c*, or both. This practically completes the entire construction of my said new toy ball, which, as abovestated, will manifest various peculiarities not observable in balls not so made—as, for instance, when such a ball is rolled it will have a peculiar jerky motion which will soon arrest its progress, after which it will rock to and fro until it comes to rest, and if spun like a top it will have another motion peculiar to this construction. It will not roll on an inclined plane of its own weight, and if rolled or spun on such a surface will show still other peculiar motions due to such conditions, and so on, all of which are very much more interesting and pleasing, because much greater, than can possibly be produced by a solid ball loaded from the outside and in which the construction is easily detected, and thus deprived of a great portion of its interest.

What I claim is—

A ball or toy consisting of a spherical shell loaded with a fixed weight at one point on the interior of said shell, substantially as specified.

CHARLES E. GOODSPEED.

Witnesses:

WM. ZIMMERMAN,
ANTON FONGNER.