

(No Model.)

G. DIERS.
CEILING TOP.

No. 527,013.

Patented Oct. 2, 1894.

Fig. 1.

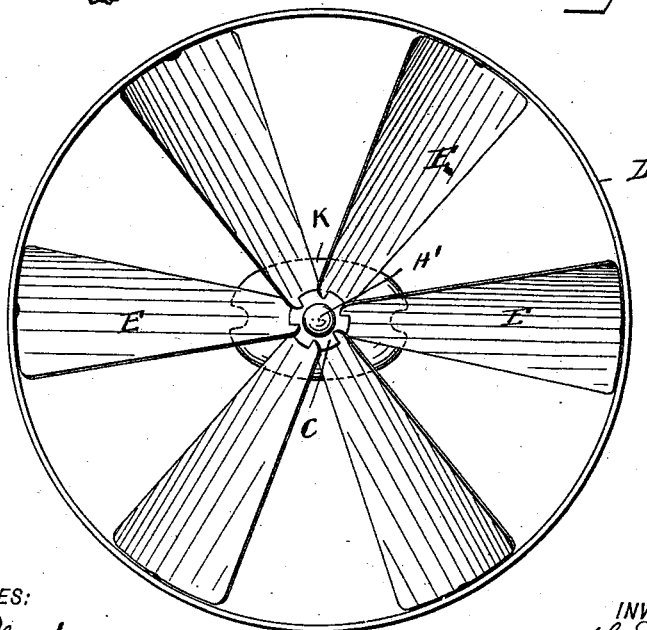
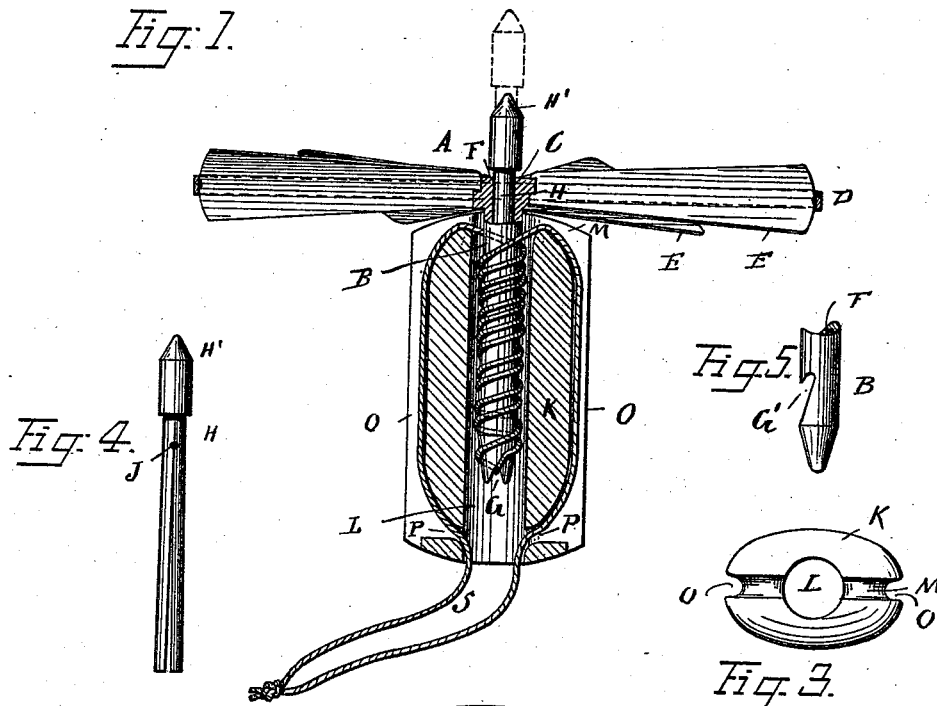


Fig. 2.

WITNESSES:
S. Pelti-Palmstedt.
Emil Haller.

INVENTOR
G. Diers
BY *Oscar A. Lunn*
ATTORNEY.

UNITED STATES PATENT OFFICE.

GERHARD DIERS, OF NEW YORK, N. Y., ASSIGNOR OF TWO-THIRDS TO
JOHANNA DIERS AND HENRY DUHNE, OF SAME PLACE.

CEILING-TOP.

SPECIFICATION forming part of Letters Patent No. 527,013, dated October 2, 1894.

Application filed June 1, 1894. Serial No. 513,113. (No model.)

To all whom it may concern:

Be it known that I, GERHARD DIERS, a subject of the Emperor of Germany, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Ceiling-Tops, of which the following is a specification.

This invention relates to improvements in spinning tops.

The object of my invention is to provide a new and improved top which is so constructed that when it is spun it rises to the ceiling and spins on the same a greater or less length of time and then drops to the floor and also continues to spin.

The invention consists in a top, formed of a windwheel provided with a central tubular stem, which stem has a notch at its lower end for receiving a cord which is passed through grooves and apertures of a holder having a longitudinal bore for receiving said stem and which holder serves for holding the top while spinning the same. A rod which acts as a cushion is mounted to slide friction tight in the bore of the tubular stem.

The invention also consists in the construction and combinations of parts and details as will be fully described and set forth hereinafter.

In the accompanying drawings forming a part of this specification and in which like letters of reference indicate like parts, in all the views, Figure 1 is a vertical sectional view of my improved ceiling top, the holder being also shown in section. Fig. 2 is a plan view of the same. Fig. 3 is a plan view of the holder. Fig. 4 is a side view of the sliding rod in the stem of the top. Fig. 5 is a side view of the lower part of the stem showing a modified construction.

The top proper is composed of the windwheel A and its central stem B. The wheel A is made of thin sheet metal, celluloid, hard rubber, pasteboard, wood or other suitable material and has a central hub C and a rim D connected with the hub by a series of spokes E which are curved and shaped like the blades of a propeller or of a wind mill wheel. The stem B which has a longitudinal bore F,

extending downward from the top, is secured at its upper end to the hub C, and has its lower end tapered and provided with a notch G. In place of providing the notch G in the lower tapered end of the stem a notch G' may be formed in the side of the stem a short distance above the lower tapered end as shown in Fig. 5.

A rod H, provided with a tapered upper end H', is mounted friction tight in the bore F in such a manner that it can slide in said bore with more or less resistance. So as to give the rod the necessary resistance it is preferably split lengthwise and provided at the upper end of the slit with a small spreading-piece J, of rubber or other suitable material, as shown in Fig. 4.

The holder K into which the top is placed for spinning it, is composed of a block of wood, hard rubber, or other material so shaped that it can conveniently be grasped in the hand. It has a central longitudinal bore L, a groove M in its upper end and extending across the upper end of the bore L and a longitudinal groove O in each side. A hole P extends from the lower end of each side groove O to the bore L and is slightly inclined downward. An endless cord S is passed up through the bore L from the lower end of the same, through the holes P; through the side grooves O and through the groove M in the upper end and over the upper end of the central bore, as shown in Fig. 1.

To spin the top, the lower end of the stem B is placed on that part of the cord S directly above the upper end of the bore L of the holder K in such a manner that the cord passes into the notch G or G' and then said stem is turned on its axis and at the same time pressed downward so that the two strands of the cord are wound on the stem and with the same are drawn down into the bore L of the holder. Then the cord is pulled downward whereby the stem is rotated axially with great speed in the holder and the top immediately rises to the ceiling, until the upper end of the rod H rests against the ceiling, on which end the top continues to turn or spin on the ceiling for a greater or less length of time, according to the force exerted

in pulling the cord. The curved spokes E serve to keep the top against the ceiling as long as it rotates at a certain speed.

To prevent the top from being thrown from the ceiling by the impact, the rod H is pulled out of the upper end of the stem a short distance before spinning the top and when the upper end of the said rod strikes the ceiling the rod is pushed into the bore of the stem and acts as a cushion to prevent the rebounding of the top and also prevents injury to the ceiling.

I am aware that spinning tops with propeller shaped blades which soar high into the air when spun, are old as well as mechanical pigeons and I do not so broadly claim to be the inventor of tops that rise when being spun, but,

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

1. The combination with a windwheel of a tubular stem projecting downward from the

center of the same and having a notch at its end opposite the windwheel, of a sliding rod in said stem and holder for receiving said stem, substantially as set forth.

2. The combination with a windwheel of a stem projecting from the same and a holder having a bore for receiving said stem, which holder is provided with side grooves for guiding a cord and with holes extending from said grooves to the bore of the holder, substantially as set forth.

3. The combination with a windwheel of a tubular stem projecting from the same and a longitudinally split rod mounted to slide in the tubular stem, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 23d day of May, 1894.

GERHARD DIERS.

Witnesses:

OSCAR F. GUNZ,
D. PETRI PALMEDO.