

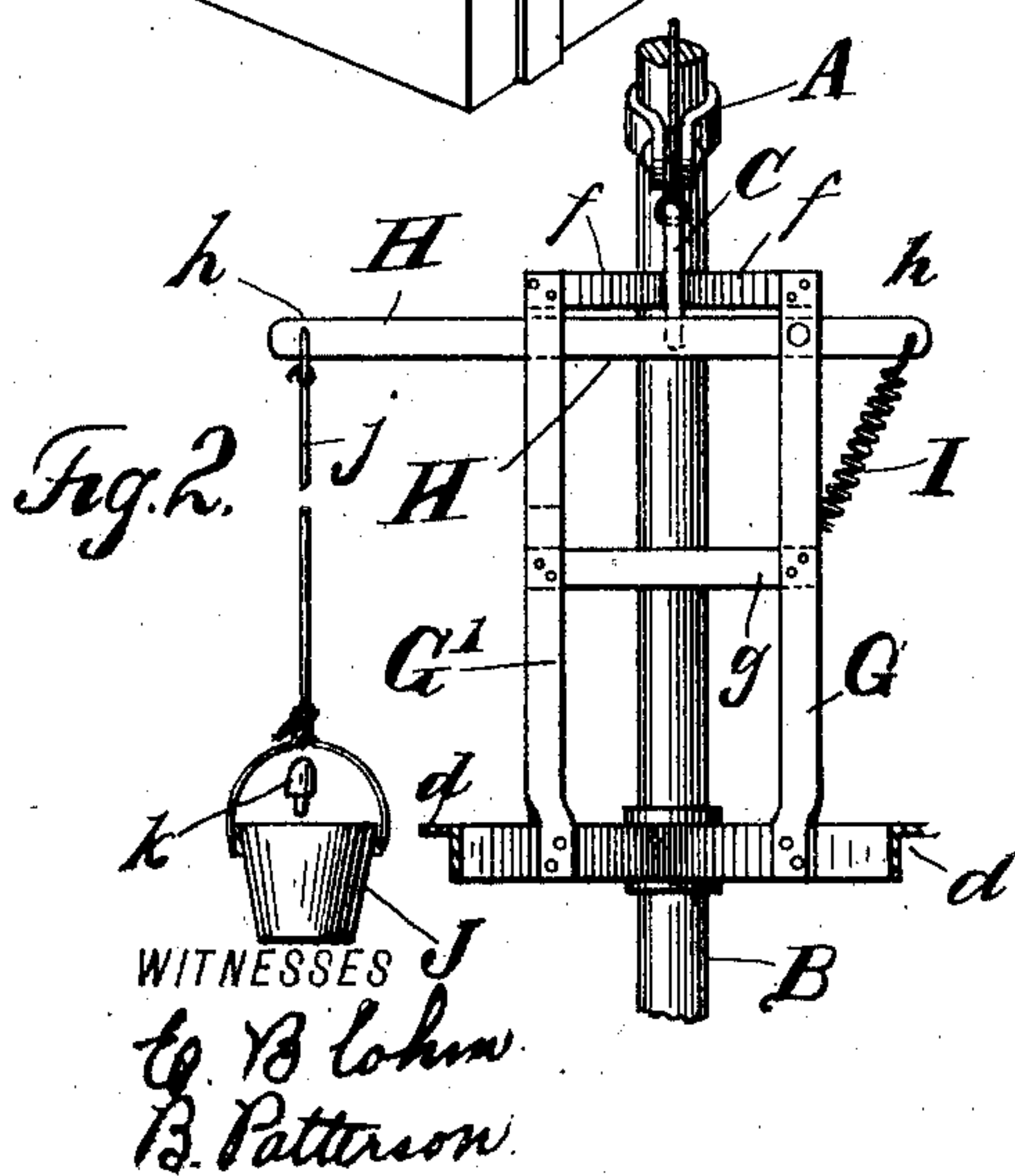
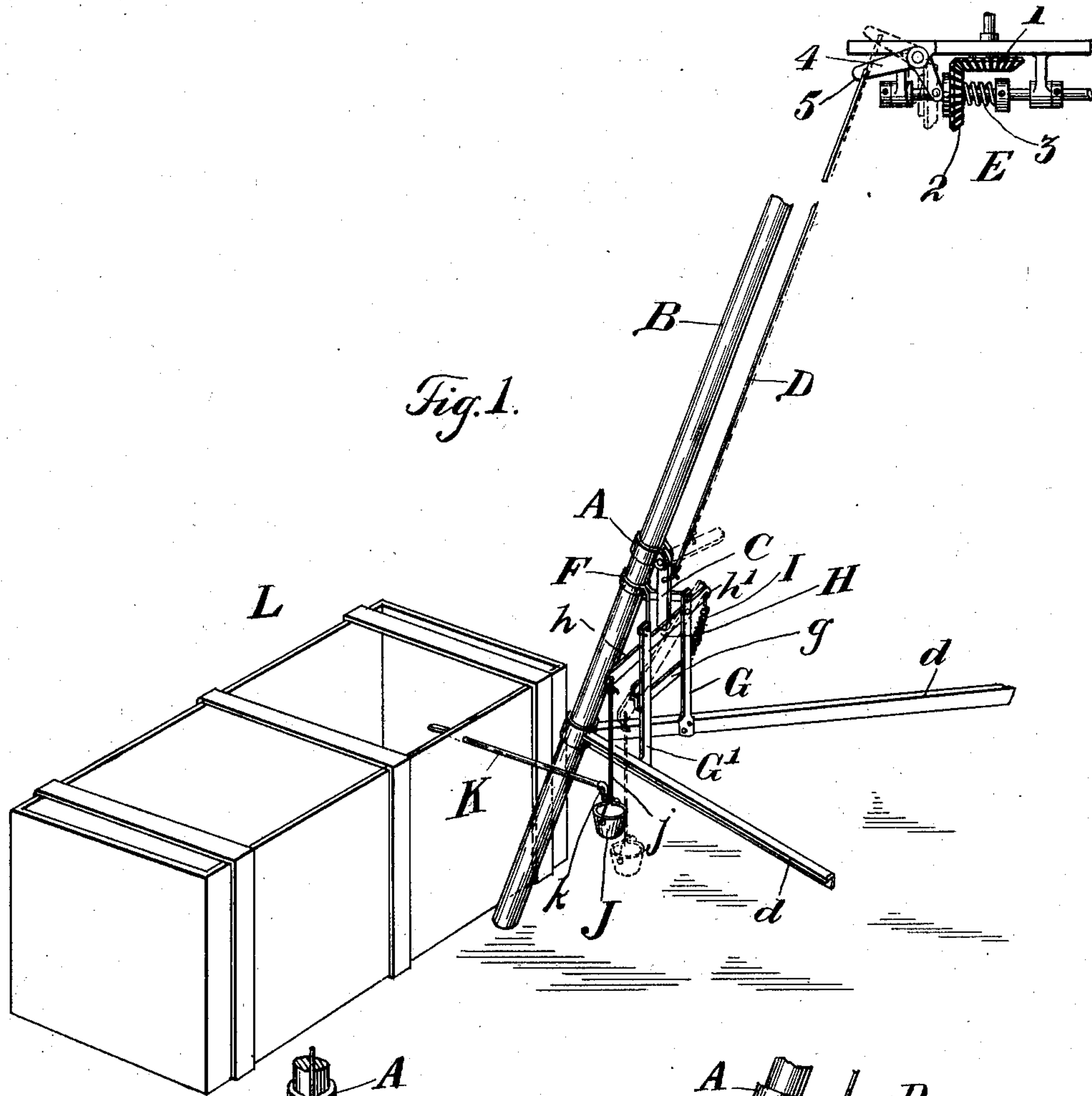
No. 706,714.

Patented Aug. 12, 1902.

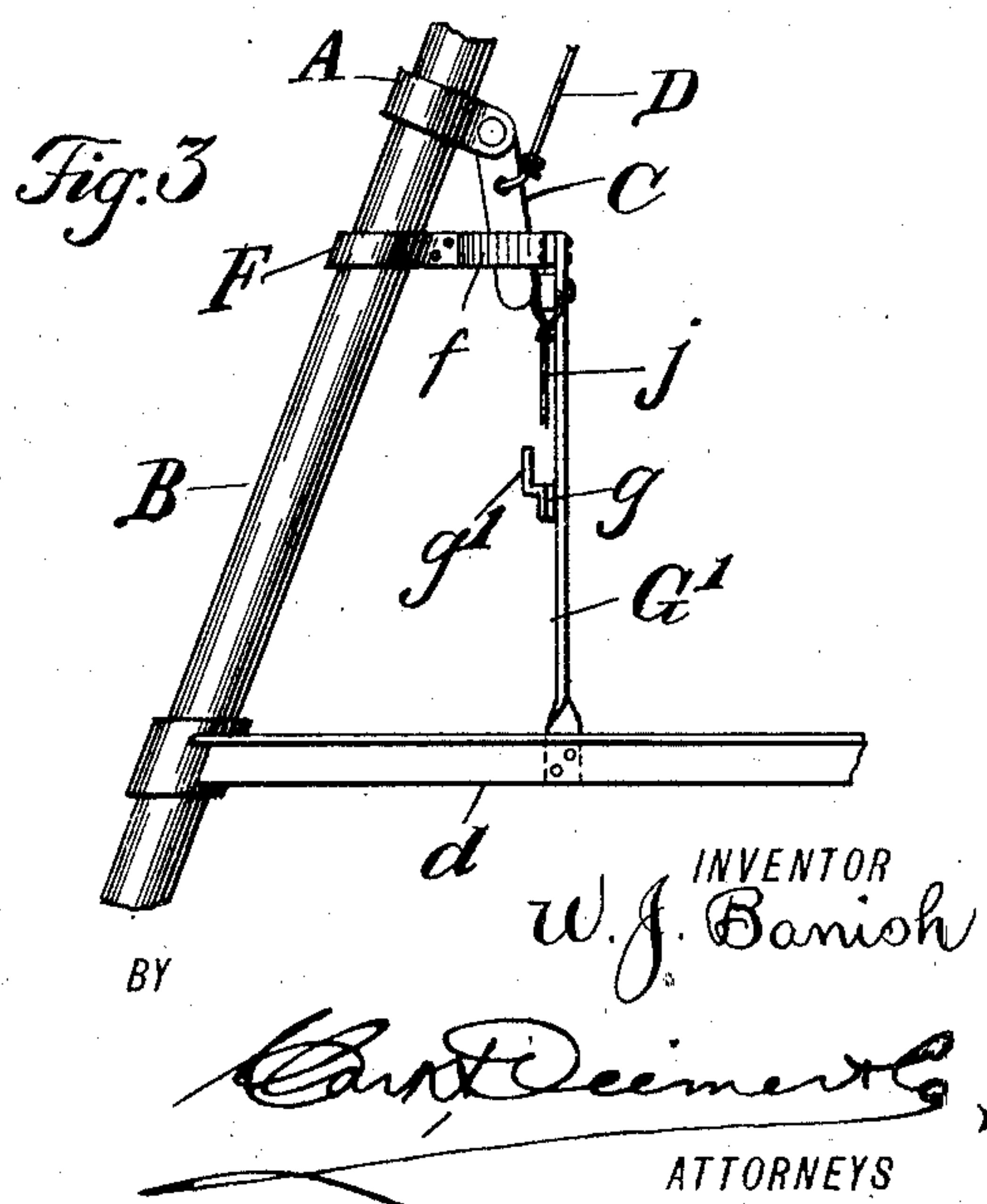
W. J. BANISH.
WINDMILL CONTROLLER.

(Application filed May 19, 1902.)

(No Model.)



WITNESSES
E. B. Lohm
B. Patterson



INVENTOR
W. J. Banish

BY

ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM J. BANISH, OF SHELDON, NORTH DAKOTA.

WINDMILL-CONTROLLER.

SPECIFICATION forming part of Letters Patent No. 706,714, dated August 12, 1902.

Application filed May 19, 1902. Serial No. 107,897. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BANISH, a citizen of the United States, and a resident of Sheldon, county of Ransom, and State of North Dakota, have invented certain new and useful Improvements in Windmill-Controllers, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar characters of reference indicate corresponding parts.

This invention relates to windmill-controllers, the object thereof being to provide a device of this character which is adapted to automatically throw the wheel out of gear when the tank is full.

The device comprises few and simple parts, which are durable, continuously operative, and readily adaptable for attachment to the framework of a windmill-tower.

The invention will be hereinafter fully described, and specifically set forth in the annexed claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of part of a windmill-tower frame having my improved device attached thereto. Fig. 2 is a front elevation of the device, drawn on a slightly-enlarged scale; and Fig. 3 is a side elevation.

In the practice of my invention I pivot to a collar A, which is secured around one leg B of the windmill-tower, a swinging lever C. This lever is connected to a rod D, which leads to the wind-wheel gearing, as E. This gearing may be of any adapted variety having spring-actuated means for forcing its parts out of gear, and it forms no part of the present invention; but for purposes of illustration I show the gearing comprising the beveled wheels 1 and 2, the wheel 2 being slidably mounted upon its shaft and adapted to be automatically thrown out of gear by means of the spiral spring 3. A bell-crank lever 4 is employed for throwing the wheel 2 in gear, and one arm 5 of this lever is connected to the upper end of the rod D.

Below the collar A and secured around the leg B is a collar F, which is provided with two diverging arms *f*. These arms are attached to uprights G G', which are connected by means

of a cross-brace *g* and are riveted at their lower ends to the braces *d* of the tower-frame.

Pivoted to the upright G is a trip-bar H, which embodies an elongated part *h* and a short extension *h'*. This bar is maintained in normal horizontal position by means of the spring I. From the elongated end of the trip-bar H is suspended a bucket J, attachment with the bar being made by means of the cord *j*. This bucket is of a relative weight when empty to be balanced by means of the spring I; but when filled with water it will overcome the tension of the spring and by its gravity carry the trip-bar downwardly until it rests against the stop *g'*, which is extended from the upright G'.

Arranged contiguous to the bucket J is an overflow-pipe K, which has a spout *k*, adapted to discharge water into the bucket. This pipe leads from the water-tank L and is extended upon a level with the high-water mark, whereby when the tank is full the water flows through the pipe to fill the bucket J.

In the operation and use of the invention when the wind-wheel is in gear and the pump acting the lever C is placed in position with its free end resting against the trip-bar H, the bucket J being empty. Then when the tank is full the overflow through the pipe K fills the bucket J and causes it to overcome the tension of the spring I and drop by gravity, carrying the trip-bar into position illustrated by dotted lines, Fig. 1 of the drawings, whereby the lever C is released and carried upwardly by means of the spring mechanism, which throws the wheel out of gear. To again place the wheel in gear, it is simply necessary to pull the lever C down and set the parts in relative position as shown by full lines of the drawings.

I do not confine myself to the specific details of construction and design as herein shown and described, as it is obvious that under the scope of my invention I am entitled to slight structural variations.

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

1. In an apparatus for automatically releasing spring-actuated gear mechanism of windmills, the combination, with a pivoted

lever, a rod extended therefrom and a spring-retained trip-bar, of a bucket suspended from the trip-bar and an overflow-pipe for filling the bucket, and a framework supporting the
5 parts, substantially as shown and described.

2. In an apparatus for automatically releasing spring-actuated gear mechanism of windmills, the combination, with the pivoted lever C and the collar A, for attachment to
10 the leg of a windmill-tower, the rod D extended from said lever, and the spring-retained trip-bar H, and a supporting-frame and means for attaching the same to the lower

part of a windmill-tower, of a bucket suspended from said trip-bar and an overflow- 15 pipe for filling the bucket, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 1st day of March, 20 1902.

WILLIAM J. BANISH.

Witnesses:

BERUT G. TENNESON,
CONRAD A. AVELLO.