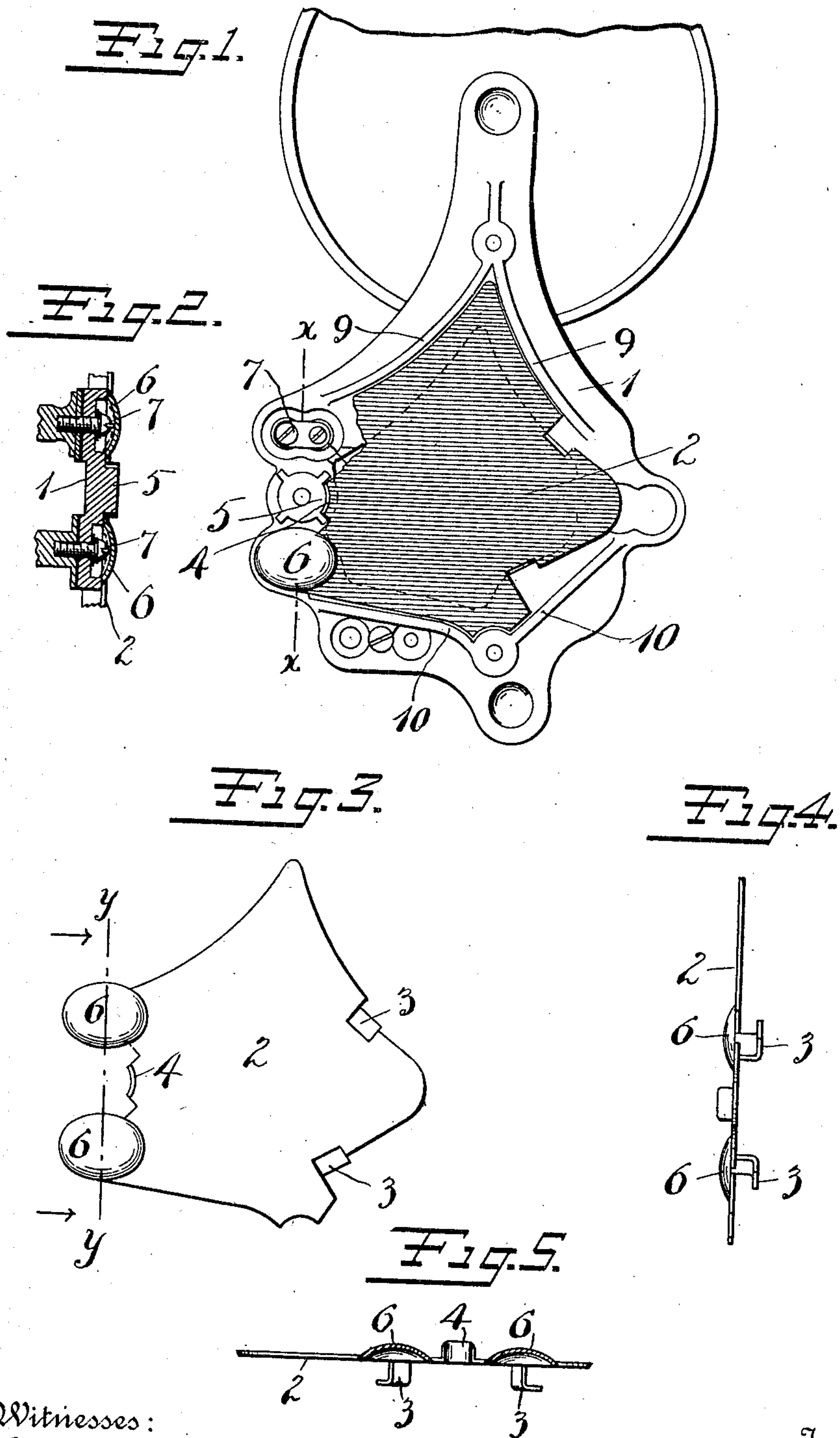


No. 872,145.

PATENTED NOV. 26, 1907.

G. L. PATTERSON.
PROTECTIVE SHIELD FOR SKELETON FRAME BELLS.
APPLICATION FILED JULY 11, 1907.



Witnesses:
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PROTECTIVE SHIELD FOR SKELETON-FRAME BELLS.

No. 872,145.

Specification of Letters Patent.

Patented Nov. 26, 1907.

Application filed July 11, 1907. Serial No. 383,186.

To all whom it may concern:

Be it known that I, GEORGE LEWIS PATTERSON, a citizen of the United States, residing at the city, county, and State of New York, have invented certain new and useful Improvements in Protective Shields for Skeleton-Frame Bells, of which the following is a full, clear, and exact description.

My invention relates to improvements in electric bells, particularly of the skeleton-frame type.

The object of the invention is to prevent short circuiting, leaking of current, and corrosion of the insulated parts in the circuit in connection with devices of this character.

In the accompanying drawings, Figure 1 is a view of the rear side of an electric bell frame with my improved protection shield in place, the same being partly broken away; Fig. 2 is a section on the line $x-x$, Fig. 1; Fig. 3 is a view of the protection shield detached; Fig. 4 is an edge view thereof; Fig. 5 is a section on the line $y-y$ looking in the direction of the arrow, Fig. 3.

1 represents the frame of a bell, the same being of skeleton form; in other words, providing a suitable reinforcing border with a cut-away center.

2 is the protection shield. As shown in Fig. 1, this shield overstands the cut-away portion of the frame, the inner edge being indicated in dotted lines, Fig. 1. If this shield were removed, it would reveal the usual electro-magnet and the various connections. It has been found in devices of this character in which a skeleton frame is provided, that much short circuiting, leaking of current and corrosion of insulating parts of the circuits occurs by reason of dampness caused by sweating of walls against which such devices are usually fastened. This is a most serious defect and to overcome this, my improved device comprehends the protection of all of these parts. The construction is such that these shields may be readily applied to or removed from the bell frames of conventional skeleton form, but in the preferred form there are some features of improvement which apply both to the frame itself as well as the bell. The protection shield 2 is preferably provided with clips 3—3 so arranged as to make suitable engagement with one side of the frame by hooking under the same.

At the opposite side is another clip 4, which is preferably so constructed as to operate

as a spring fastener, although this is not essential. This clip snaps under a suitable part such as 5 of the frame, effectively locking the shield in place. 6—6 are cap-like extensions, which may be provided at the edge of the shield to overstand the usual terminals and screws indicated at 7—7. These screws are at the back of the frame and are ordinarily covered with wax, but the provision of wax alone is frequently insufficient, as it is sometimes rubbed off or broken out, rendering the parts unprotected. If desired, this wax may be used or not, with the protecting shield, but by slightly crowning the cap pieces 7—7 a sufficient clearance is provided for the use of wax if desired. These insulating terminals 7—7 are thereby effectively guarded against dampness and attending corrosion. The presence of the shield not only protects these insulating terminals but likewise protects the various circuit wires leading to the magnets as well as the magnets themselves.

9—9 is a flange which performs the double function of centering the shield 2 at one end of the frame and of acting as a dam or water-shed, the said flange extending above the surface of the shield 2. 10—10 is a similarly flanged portion at the opposite side of the shield 2, which performs a similar function. By this arrangement the bell may be used gong uppermost or lowermost, as desired.

What I claim is:—

1. The combination with a bell having a skeleton frame, of a protecting shield means securing the same at the back of the frame and a water-shed for said shield.

2. The combination with a bell having a skeleton frame, of a protecting shield, means securing the same at the back of the frame, and flanges on the back of the frame at the top and bottom engaging said shield.

3. The combination with a bell having a skeleton frame, of a detachable protecting shield at the back of said frame and ribs on the body of said frame centering said shield.

4. The combination with a bell having a skeleton frame, of a detachable protecting shield at the back of said frame, said shield having clips adapted to engage the frame and water-sheds on the back of said frame on opposite sides of said shield.

5. The combination with a bell having a skeleton frame, of a protecting shield de-

tachably engaging the back of the frame, and cap-like extensions on said shield overstanding the terminals.

6. The combination with a bell having a
5 skeleton frame, of a detachable shield with cap-like extensions adapted to overstand the terminals, and clips on opposite sides

adapted to engage the back of the frame, and water-sheds on the back of said frame on opposite sides of said shield.

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