

No. 879,601.

PATENTED FEB. 18, 1908.

D. G. THALMAN,
FIRE ALARM.

APPLICATION FILED MAY 13, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

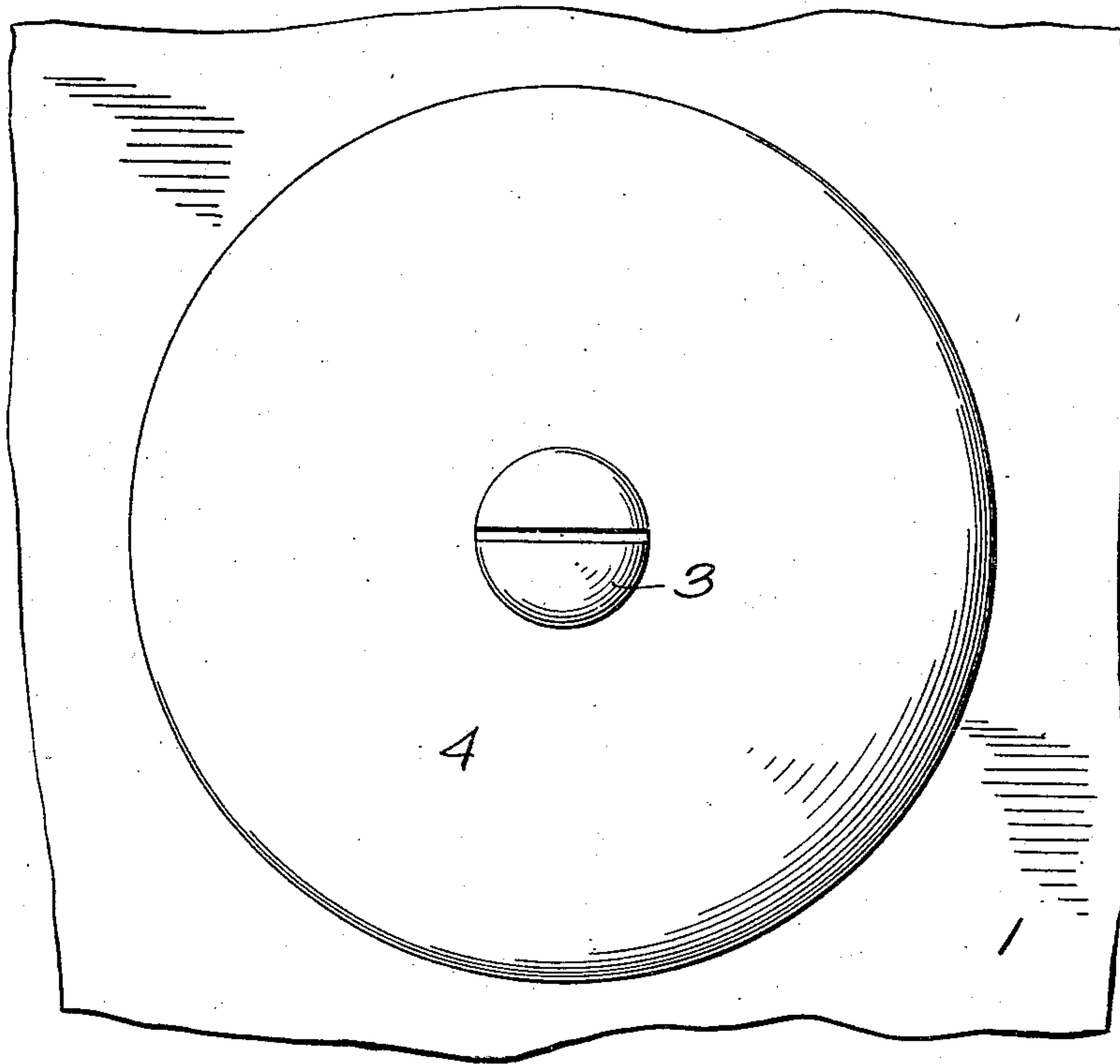
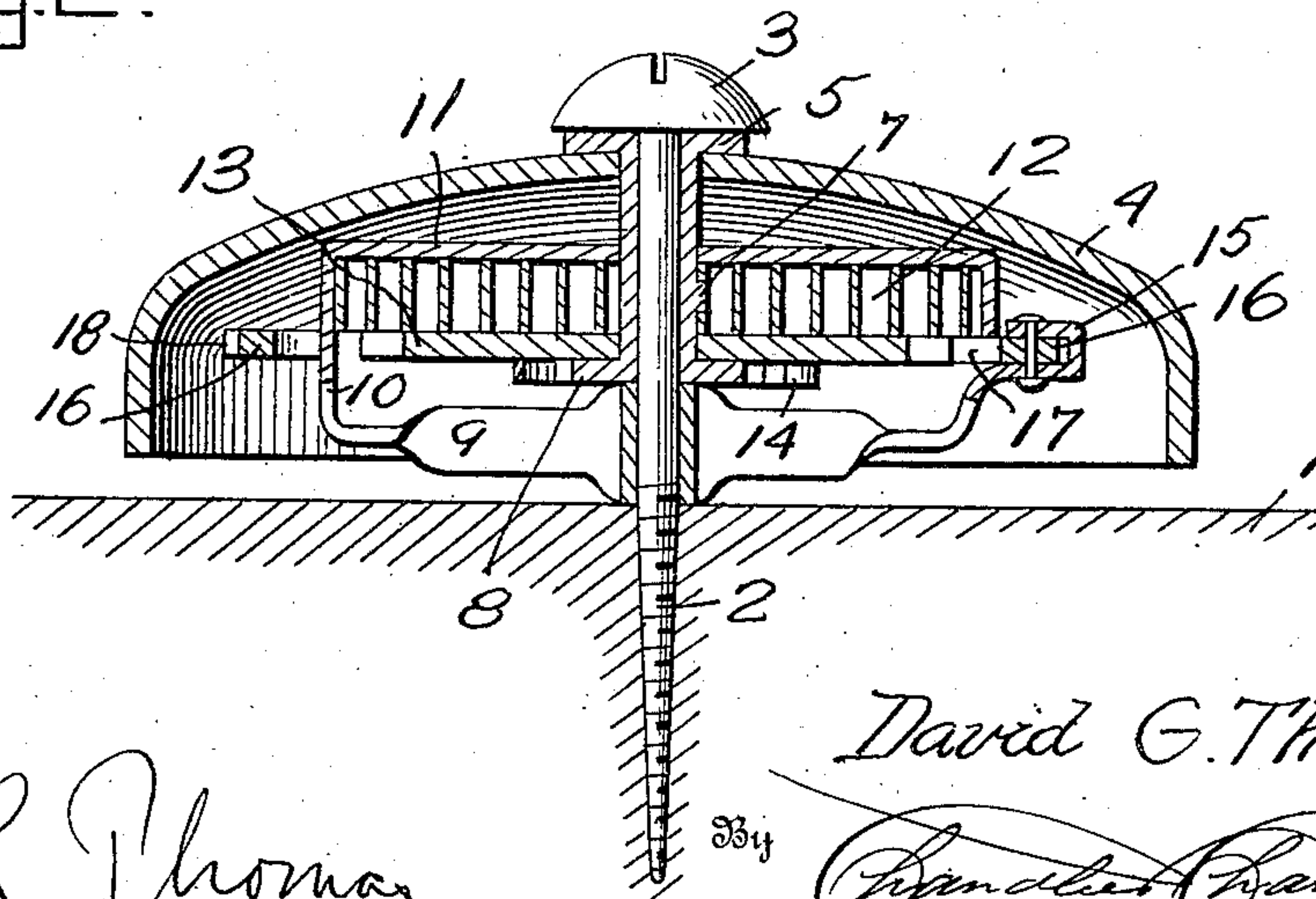


Fig. 2.



Witnesses

G. R. Thomas
John P. Myers.

Inventor

David G. Thorman

By

Charles Chandler

Attorney

No. 879,601.

PATENTED FEB. 18, 1908.

D. G. THALMAN.

FIRE ALARM.

APPLICATION FILED MAY 13, 1907.

2 SHEETS—SHEET 2.

Fig. 3.

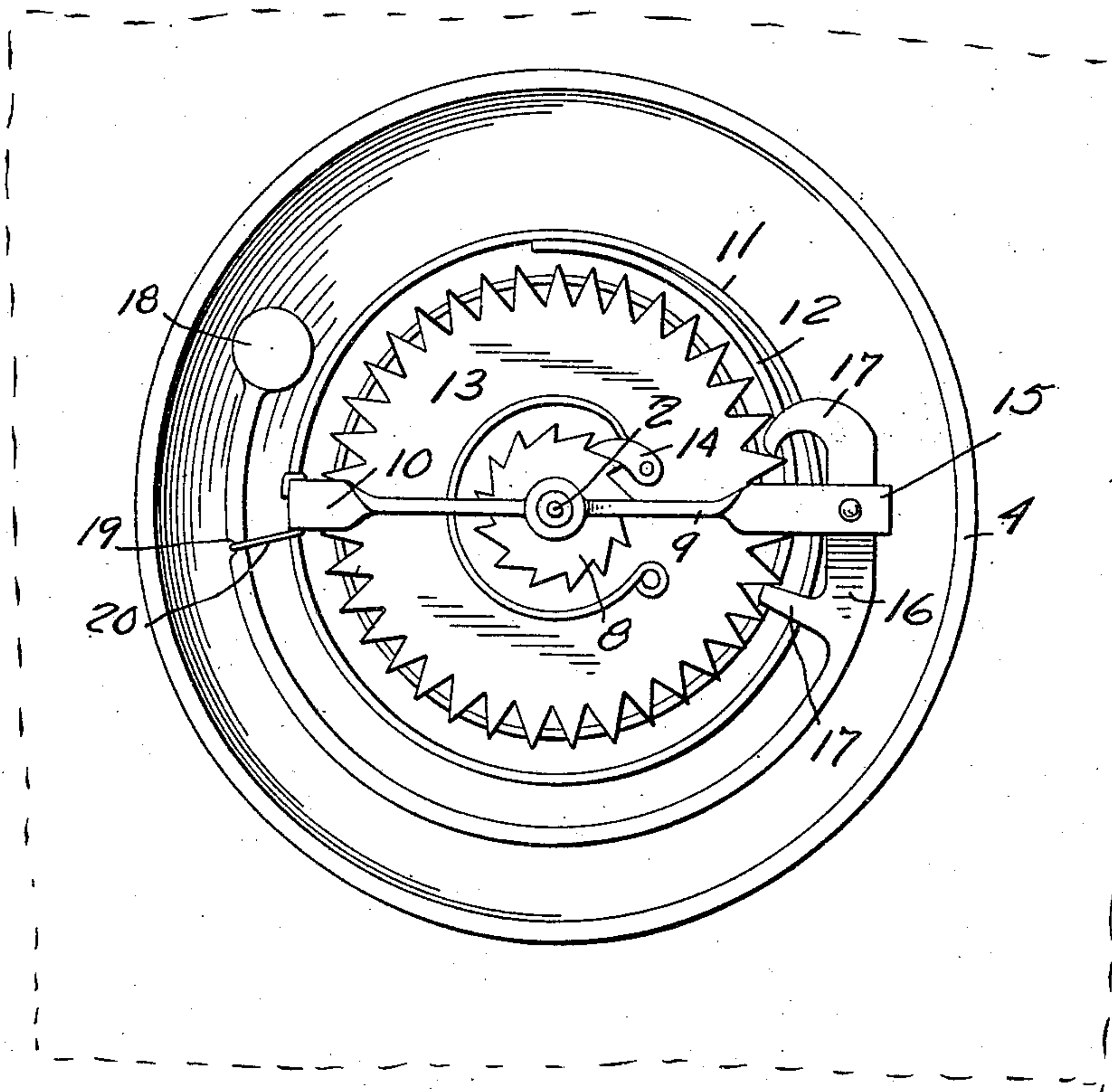
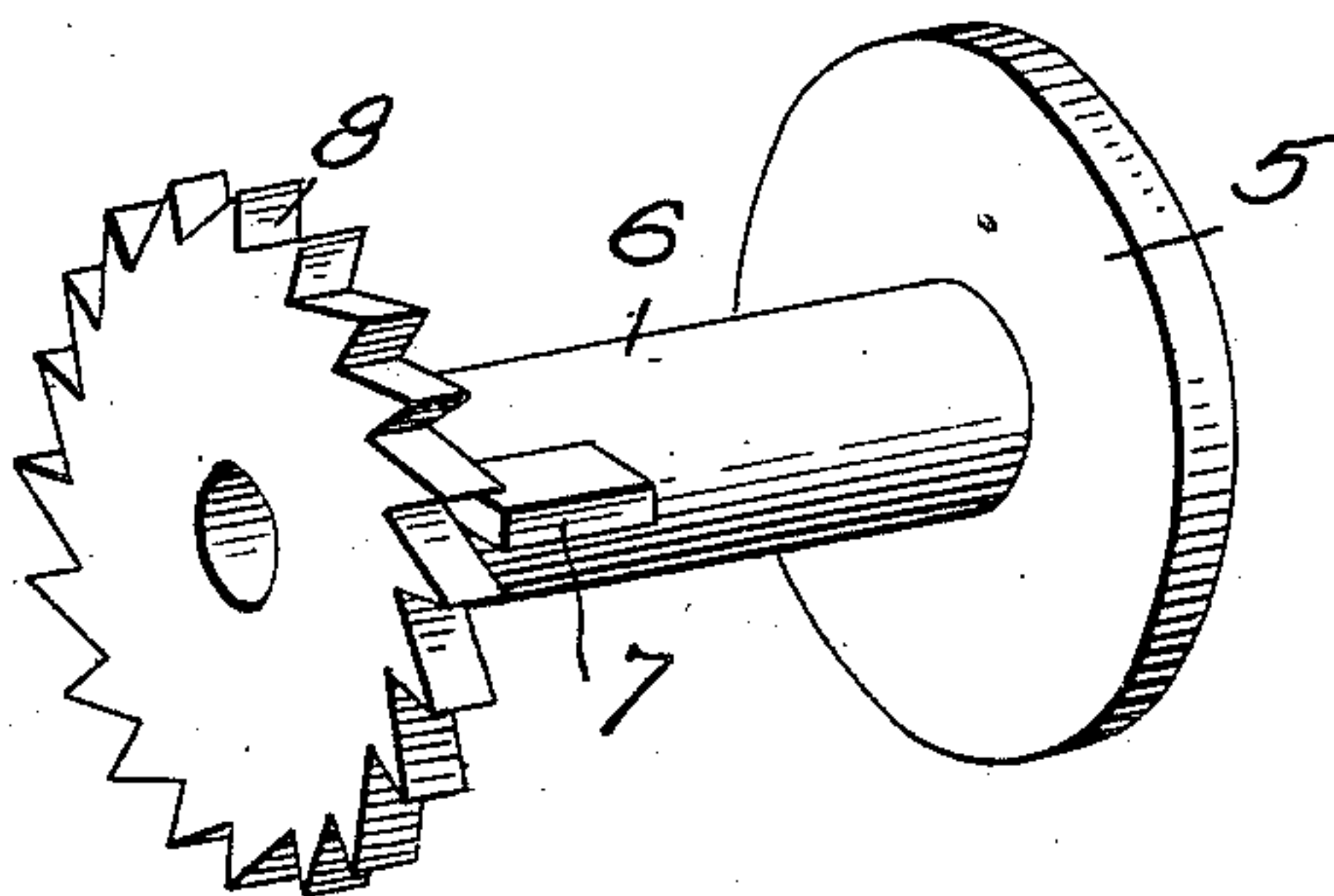


Fig. 4.



Witnesses

G. R. Thomas
John D. Myers.

Inventor

David G. Thalmann

By

Charles Chandler

Attorneys

UNITED STATES PATENT OFFICE.

DAVID G. THALMAN, OF KANSAS CITY, MISSOURI.

FIRE-ALARM.

No. 879,601.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed May 13, 1907. Serial No. 373,315.

To all whom it may concern:

Be it known that I, DAVID G. THALMAN, a citizen of the United States, residing at Kansas City, in the county of Jackson, State of Missouri, have invented certain new and useful Improvements in Fire-Alarms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in fire alarms and more particularly for an alarm for residences, apartment houses, hotels and places of like character and which specifically embodies a spring wound bell, a clapper and a fusible connection for normally holding the bell against rotation.

In connection with a bell of the above type the invention aims as a primary object to provide a novel construction, combination and arrangement of parts, the details of which will appear in the course of the following description, in which reference is had to the accompanying drawings forming a part of this specification, like characters of reference designating similar parts throughout the several views, wherein:—

Figure 1 is a plan view of a bell constructed in accordance with the present invention. Fig. 2 is a central longitudinal sectional view thereof. Fig. 3 is a rear elevation thereof, the supporting wall being indicated by dotted lines. Fig. 4 is a detailed perspective view of a centrally located sleeve to which one end of the power spring is attached.

Referring specifically to the accompanying drawings, the numeral 1 designates a wall or other support in which is threaded a bolt 2 having an enlarged head 3. The bolt 2 is projected through a bell 4 of the usual dish shape and secured to the inner face of a flange 5 is a sleeve 6, having between its ends a lug 7 and a ratchet wheel 8 at the inner end thereof. A metallic spacing member 9 is held fast upon the bolt 2 rearwardly of the sleeve 6 and has one end flattened and bent at right angles as at 10, the bent end 10 being rigidly secured to a metallic cap 11 preferably by integral formation therewith within which cap 11 a flat coil spring 12 is disposed, the spring 12 having one end engaged with the lug 7 and

having its other end engaged with said cap. The sleeve 6 is projected through a toothed wheel 13, which is loose on said sleeve and which carries a spring pressed pawl 14 for engagement with the ratchet wheel 8. The other end of the member 9 is flattened and bent upon itself as at 15 to pivotally receive the end of a curved lever 16 which is formed on each side of its pivot with escapement teeth 17 for engagement with the teeth of the wheel 13. The lever 16 is curved into semi-circular shape and at its free end carries a tapper 18. Adjacent said tapper the lever 16 is formed with a notch 19 in which is engaged one end of a fusible wire or other connection 20, the other end of said wire being engaged with the adjacent end of the member 9.

In operation, when the heat reaches an extreme degree the fusible connection 20 will melt and will release the lever 16. In such action the spring 12 is free to exert its influence, and by virtue of the connections described will rotate the bell and the sleeve 6 connected therewith. By reason of the provision of the pawl 14, the wheel 13 will be rotated with said sleeve, and will vibrate the lever 16 so as to rapidly tap the bell during its rotation and thereby apprise the occupants of the building of their danger.

A device constructed in accordance with the present invention is simple in construction, inexpensive to manufacture and practical and efficient in use.

From the foregoing description it will be seen that simple and efficient means are provided for accomplishing the objects of the invention, but while the elements herein shown and described are well adapted to serve the functions set forth, it is obvious that various minor changes may be made in the proportions, shape and arrangement of the several parts, without departing from the spirit and scope of the invention as defined in the appended claim.

What is claimed is:

A device of the type set forth, comprising a bolt, a bell mounted thereon for rotation, a sleeve surrounding said bolt and having one end fixed to said bell, a ratchet wheel carried at the other end of said sleeve, a spacing member fixed to said bolt, and stationary cap supported from said spacing member and

surrounding said sleeve, a flat coil spring having an end engaged with said sleeve and with said cap, a toothed wheel mounted upon said sleeve for movement therewith, a lever
5 having an end pivoted to said spacing member and having escapement teeth on each side of its pivot for engagement with the teeth of said wheel, a tapper carried at the free end of said lever and a fusible connec-

tion between said lever and said spacing member.

In testimony whereof, I affix my signature, in presence of two witnesses.

DAVID G. THALMAN.

Witnesses:

M. C. RUFUS,

C. B. WINSBOROUGH.