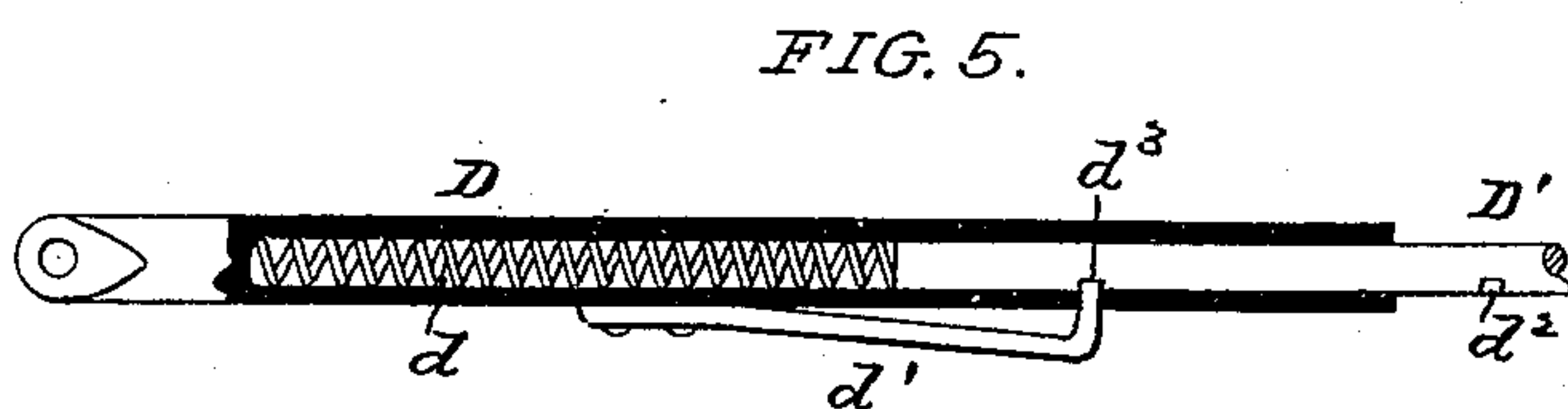
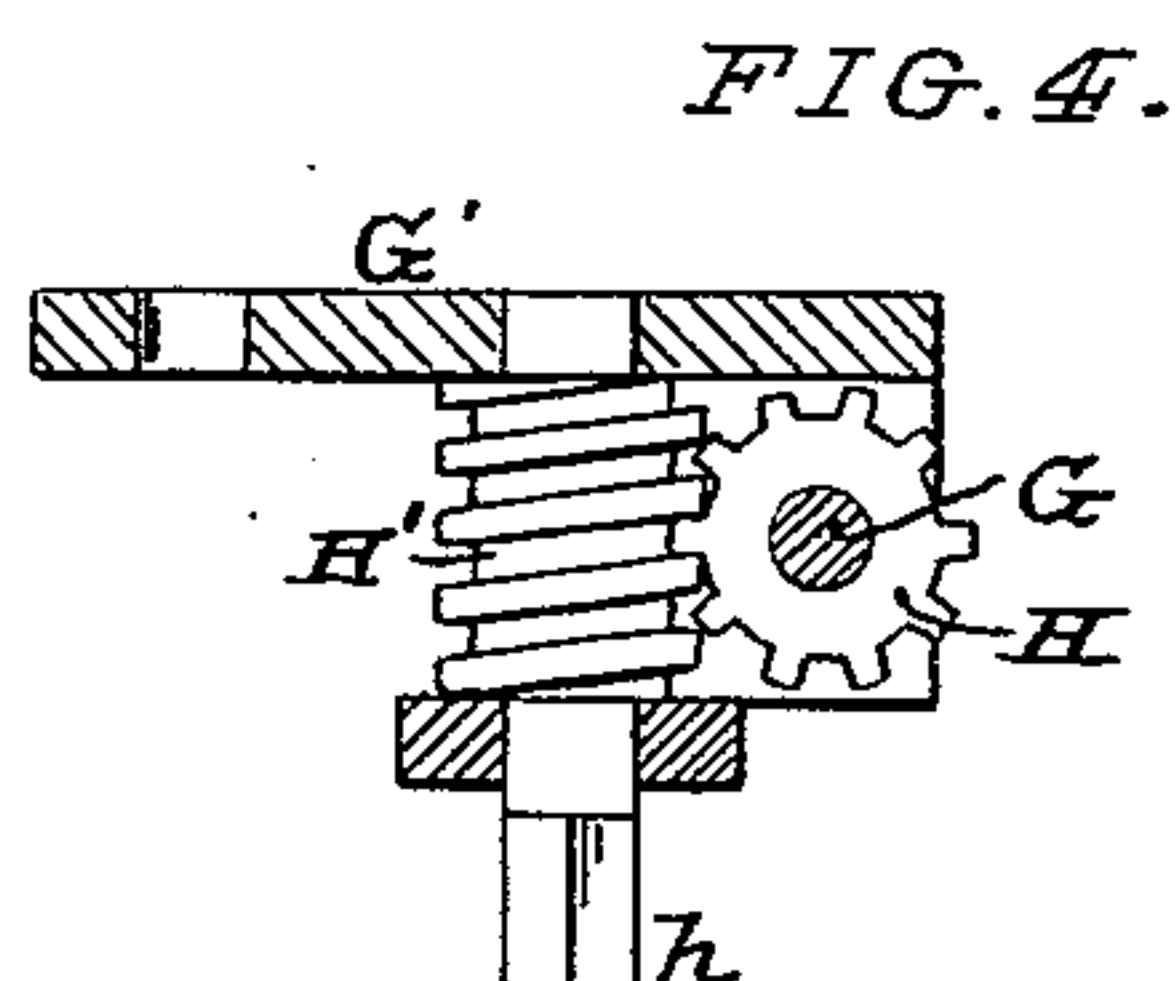
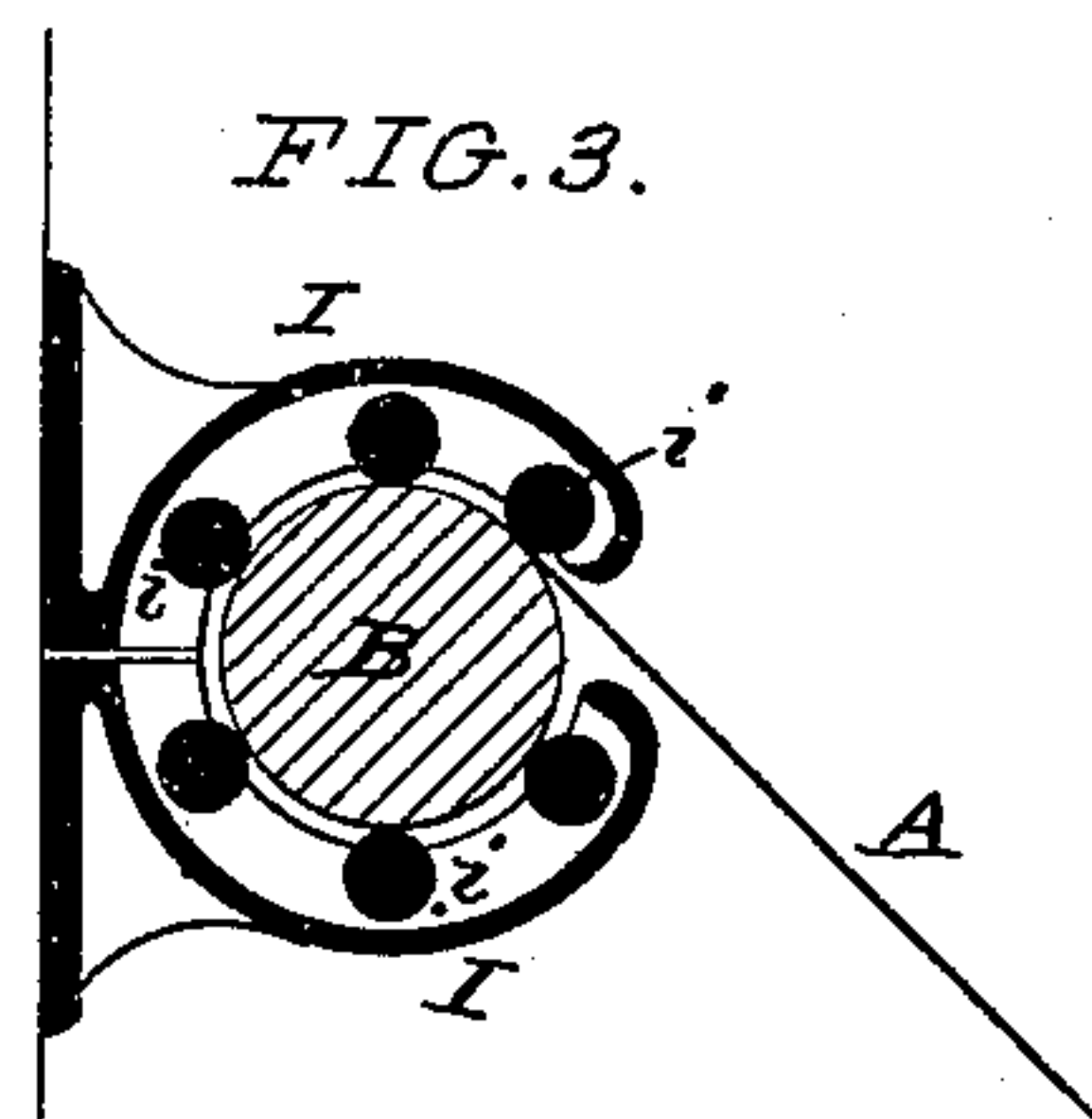
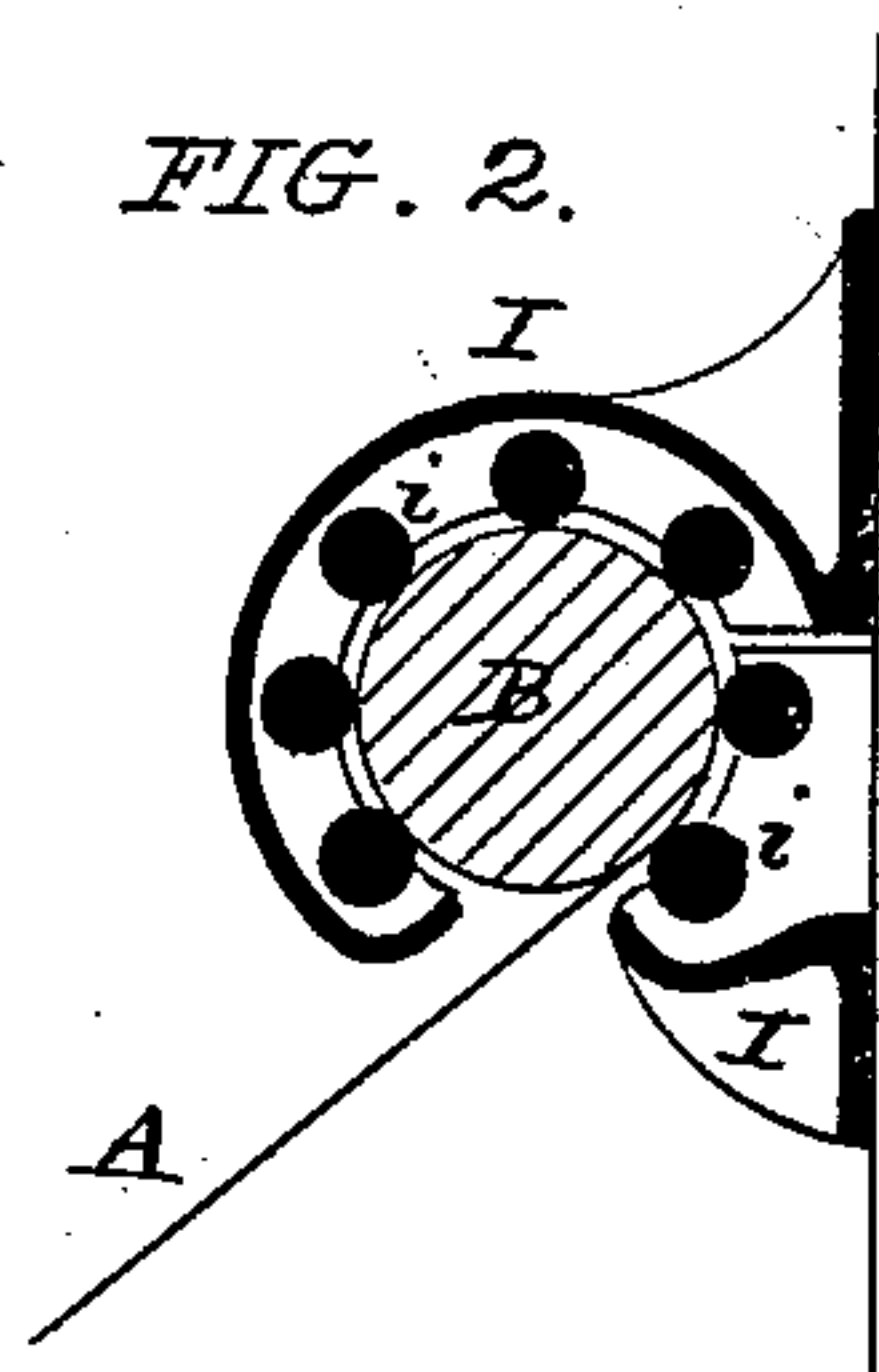
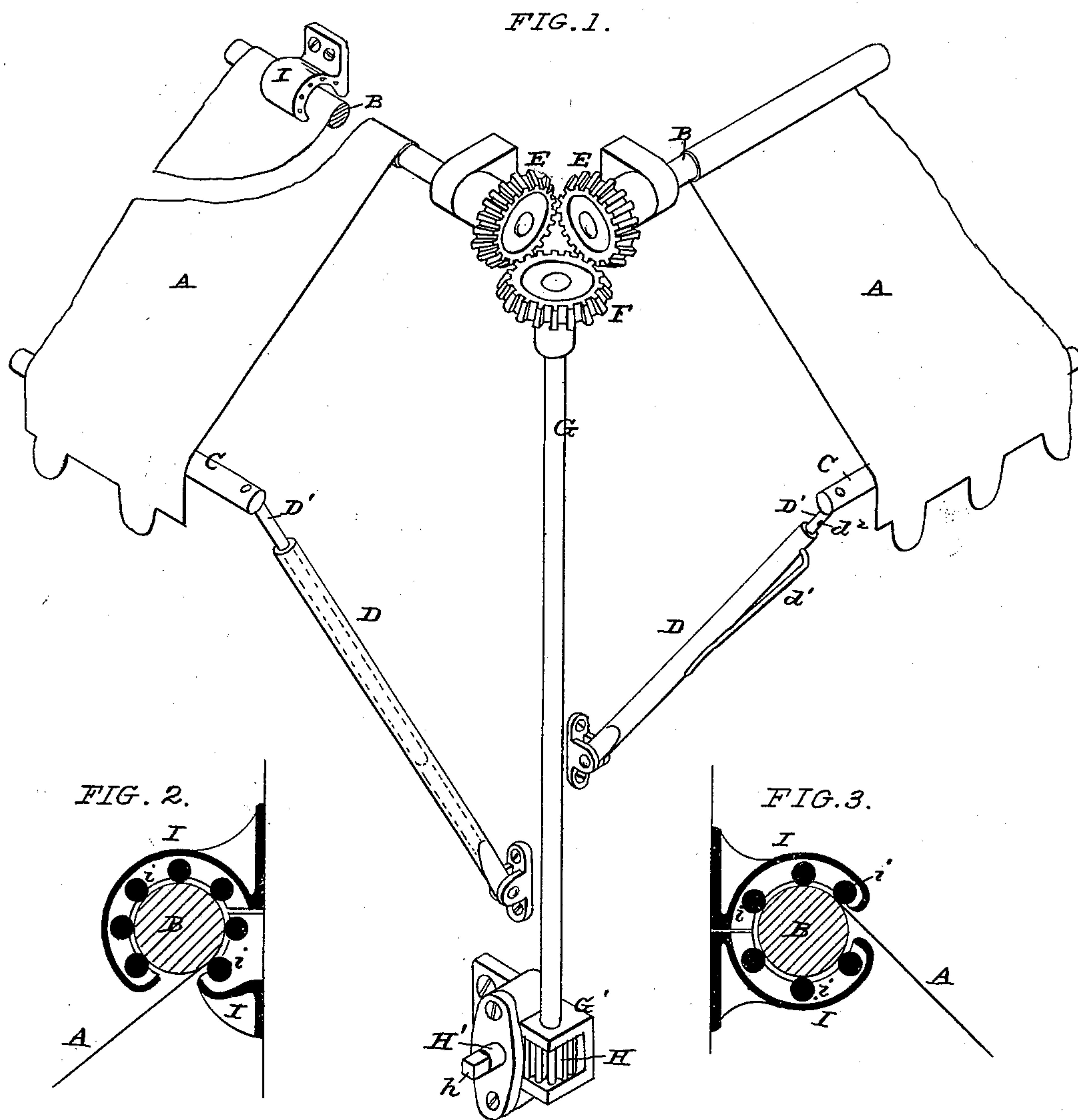


C. E. FRITSCH.
Awning.

No. 231,033.

Patented Aug. 10, 1880.



ATTEST:

Robert B. Bynum
Wm. St. J. Emme

INVENTOR:

C. E. Fritsch

UNITED STATES PATENT OFFICE.

CARL E. FRITSCH, OF ST. LOUIS, MISSOURI.

AWNING.

SPECIFICATION forming part of Letters Patent No. 231,033, dated August 10, 1880.

Application filed October 18, 1879.

To all whom it may concern:

Be it known that I, CARL EMIL FRITSCH, of the city of St. Louis, in the State of Missouri, have invented certain new and useful
5 Improvements in Awnings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification.

10 My invention consists in certain details of construction, as will hereinafter more fully appear.

In the drawings, Figure 1 is a perspective view, illustrating my invention arranged at the
15 corner of a building. Figs. 2 and 3 are detail sectional views of the anti-friction supports. Fig. 4 is a view, partly in section, of the worm and worm-wheel operating mechanism. Fig. 5 is a view, partly in section, of the awning
20 stay-rod.

In the drawings, A represents the awning, which rolls upon a roller, B, and its outer end is attached to the rod C, which is hinged to the wall of the building by a stay-rod, D.

25 As shown in Fig. 1, there are two awnings, one at the front and one at the side of the building, with their rolls provided with duplicate bevel-gears E, which mesh with and are operated by a single bevel-gear, F, at the top
30 of a vertical shaft, G. This shaft is supported in a housing, G', and has on its lower end a worm-wheel, H, which is driven by an endless screw or worm, H', journaled in the housing G, and having a square shaft, h, for the en-
35 gagement of a handle or key, by which it is rotated.

By means of the improved construction above described both awnings can be operated at the same time, and can be adjusted
40 and held to any desired elevation without any trouble.

I is an anti-friction support for the center of the awning-roll B, and consists of a number of friction-rollers, i, arranged in the casing or housing I, secured to the side of the house, as clearly indicated in Figs. 1, 2, and 3.
45

This device is intended to support the center of the roll B and prevent sagging, and by its use awnings of any required length can be used
50 successfully.

The stay-rod D is made in two portions, D D', one sliding within the other, so as to form an extensible rod for the purpose of giving a wide or narrow spread to the awning. When a wide spread is desired the part D' will rest
55 upon a spiral spring, d, which, when the awning is being lowered, will force the free end of the same outward to cover a large portion of the pavement. When a narrow spread is required the spiral spring will be omitted, and
60 the portions D D' will slide together by gravity as the awning is being lowered, and will thus cause the awning to cover a smaller portion of the pavement, &c.

d' is a spring-catch engaging notches d² d³ 65 in the part D' to lock the parts D D' in their in or out position, as required.

Both awnings being operated by a single bevel-wheel, one will necessarily roll over its roller B, while the other will roll under its
70 roller, so that the anti-friction support will be required to be adapted to each mode. The construction of the anti-friction support for the one is shown in Fig. 3 and for the other in Fig. 2. 75

Having thus fully described my said invention, what I claim is—

1. The combination, with the awning-roll B, of the supporting-frame I, made in two portions, as shown, and carrying friction-rolls i
80 above and below the awning-roll, as and for the purpose set forth.

2. The combination of the stay-rod, made in two parts, D D', one of which slides within the other, spring d, rod C, roll B, and awning A, 85 as and for the purpose set forth.

3. The combination of the stay-rod, made in two parts, D D', one of which slides within the other, spring-catch d', and notches d² d³ with the awning A, roll B, and rod C, as and for 90 the purpose set forth.

Witness my hand this 7th day of October, 1879.

C. EMIL FRITSCH.

In presence of—

JOHN J. GERBING,
JAMES CARROLL.