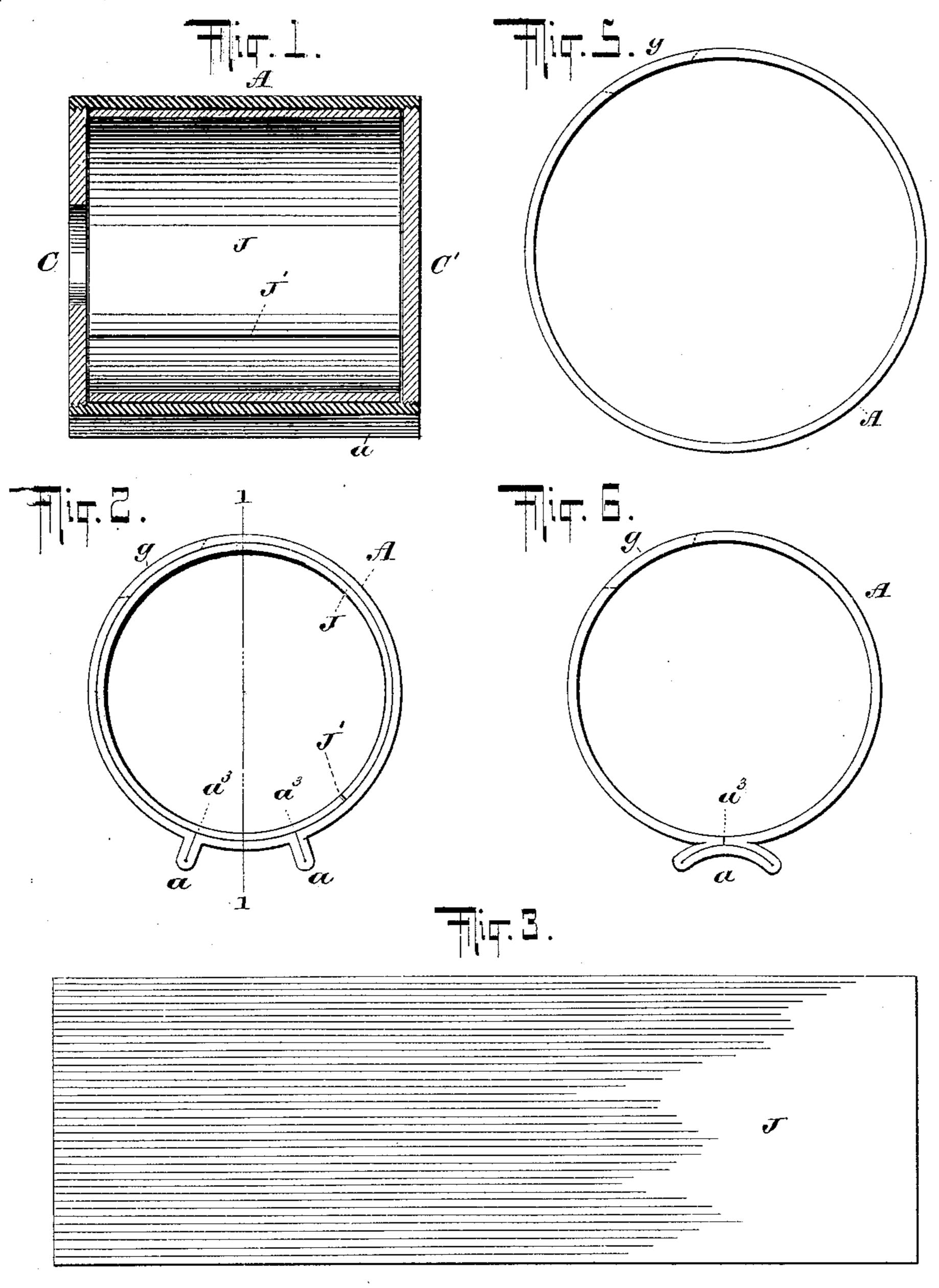
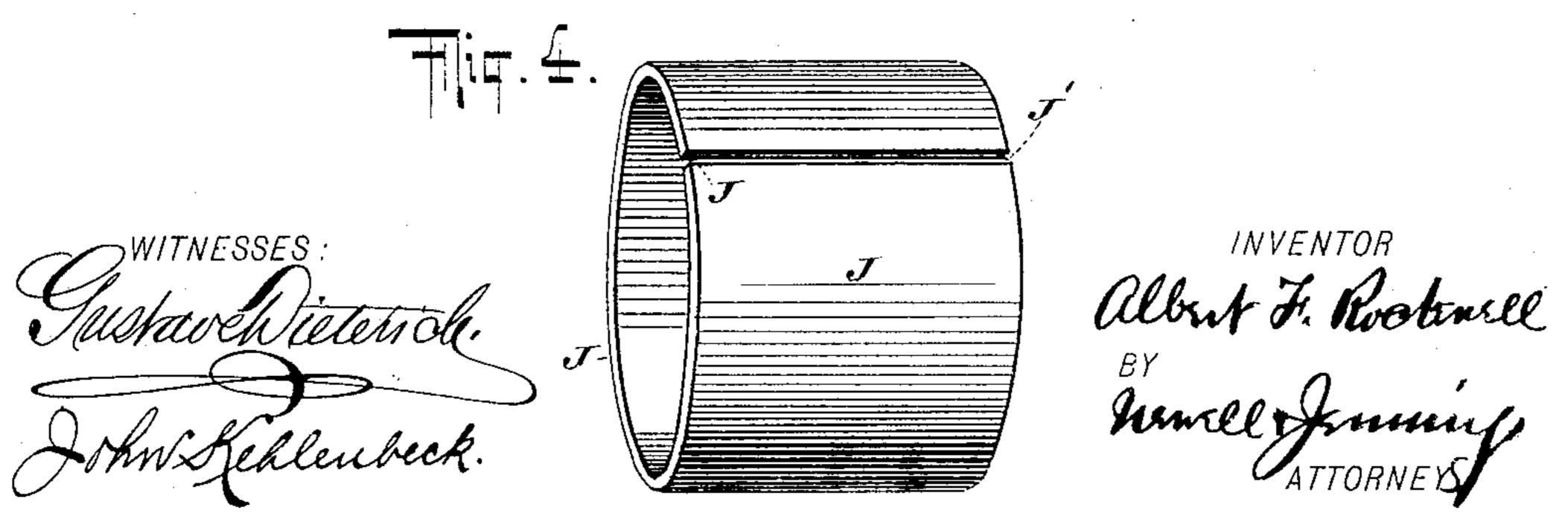
Patented Dec. 5, 1899.

## A. F. ROCKWELL. CASE FOR CYCLOMETERS.

(Application filed Jan. 26, 1898.)

(No Model.)





## United States Patent Office.

ALBERT FENIMORE ROCKWELL, OF BRISTOL, CONNECTICUT, ASSIGNOR TO THE NEW DEPARTURE BELL COMPANY, OF SAME PLACE.

## CASE FOR CYCLOMETERS.

SPECIFICATION forming part of Letters Patent No. 638,401, dated December 5, 1899.

Application filed January 26, 1898. Serial No. 667, 966. (No model.)

To all whom it may concern:

Be it known that I, Albert Fenimore Rockwell, of Bristol, in the county of Hartford and State of Connecticut, have invented ed certain new and useful Improvements in Cases for Cyclometers; 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 generally to improvements in the case or container for cyclometers, but does not pertain to the mechanism for manipulating the cyclometer, which may 15 be, so far as this invention is concerned, of

any appropriate construction.

The drawings illustrate a particular form of embodiment of the invention which is especially adapted for cyclometers to be used in connection with velocipedes or bicycles.

The object of my invention is to produce a case for the above-mentioned purpose which can be manufactured inexpensively, practically, and conveniently, and which at the 25 same time will fulfil the requisites of a container for mechanism appropriate to this purpose. Among these requisites are these: The container must be light in weight, must contain an opening through which can be seen 30 the figures upon the counting-disks, which must be protected by a transparent covering, so as to inclose the mechanism within the disk and at the same time permit the figures upon the counting-disk to be seen, and on 35 account of the inevitable exposure must be practically air-tight to prevent intrusion of dirt, dust, and water, which would tend to interfere with the operation and injure the mechanism of the cyclometer proper.

The essence of my invention consists in the production of an inexpensively-made, but desirable, metal case and the use of the ends to inclose the same in connection with a transparent membrane, all of which will be described more particularly hereinafter.

Reference is to be had to the annexed drawings and to the letters marked thereon, forming a part of this specification, the same letters designating the same parts or features wherever they occur.

Figure 1 is a longitudinal sectional view of | the ends or bases of the metal cylinder. The

the cyclometer-case upon the line 1 1 of Fig. 2. Fig. 2 is a cross-sectional view of the cyclometer-case, taken at any point between the ends. Fig. 3 represents the sheet of trans-55 parent membrane cut to size. Fig. 4 is a perspective view of the same formed ready for insertion in the case. Fig. 5 is a cross-sectional view of the metal tubing out of which is formed the case; and Fig. 6 is a cross-sectional view of the shell of the case, taken at any point between the ends.

A is the metal cylindrical part of the case. C C' are the ends adapted to be fastened into the bases of the cylindrical portion of 65 the case, preferably by screw-threads, as represented in Fig. 1.

J is a transparent membrane of any suitable able material. Sheets of celluloid of suitable thickness have been found convenient and 70

appropriate in use.

Fig. 5 is a view in cross-section of a cylindrical metal tube before it is drawn to the requisite size for the case. After drawing it takes the form shown in Figs. 2 and 6, the 75 extra metal being folded into ribs or continuous loops, (represented by the letter a in said figures.) It is usual and requisite for the convenient use of an instrument of this nature to have such a rib or ribs by means of which the 80 case may be attached to the wheel of a vehicle by means of a clamp adapted to engage the ribs and adjustable thereon. Therefore metal tubing of sufficient diameter and size, as represented in Fig. 5, is selected, so that 85 it may be drawn down to the requisite form and size, as illustrated in Figs. 2 and 6, the surplus metal of the tube being folded into such a rib or ribs, Fig. 2 showing two such ribs and Fig. 6 showing one rib with two 90 edges.  $a^3$  represents the line of junction of the folded material. The tube having been reduced to the appropriate size, having the rib or ribs as described and cut to the right length, the membrane, which must be cut ex- 95 actly the right size, is forced into the tube, the ends of the membrane butting together at J, so that the membrane shall form a lining which is an absolute fit, and thus insure against the introduction of dust or dirt. 100 Thereupon the heads C C' are screwed into

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membrane is cut to an exact size, so that when these heads have been applied to the cyclometer they screw up and butt against the edges of the aforesaid membrane.

g marks the horizontal opening in the circumferential surface of the case of the usual character and which extends the entire length thereof, with the exception of a narrow rim at the ends.

a cyclometer-case very light and neat in appearance, with no superfluous parts to get out of order or become detached, one very simple and inexpensive to manufacture, one that secures the mechanism from the intrusion of dust and dirt, and one which may be made

without the necessity of any extra expenditure in time or material.

Having thus described my invention, what

I claim as new, and desire to secure by Letters 20 Patent, is—

A cyclometer-case comprising in its construction a metal cylinder with an opening along its length, a transparent membrane fitting closely to the interior circumference of 25 said cylinder with ends butting against each other, and heads fastened into the ends of said cylinder and butting against the two edges of said membrane, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ALBERT FENIMORE ROCKWELL.

Witnesses:
JOHN J. JENNINGS,
ALICE E. BROWN.