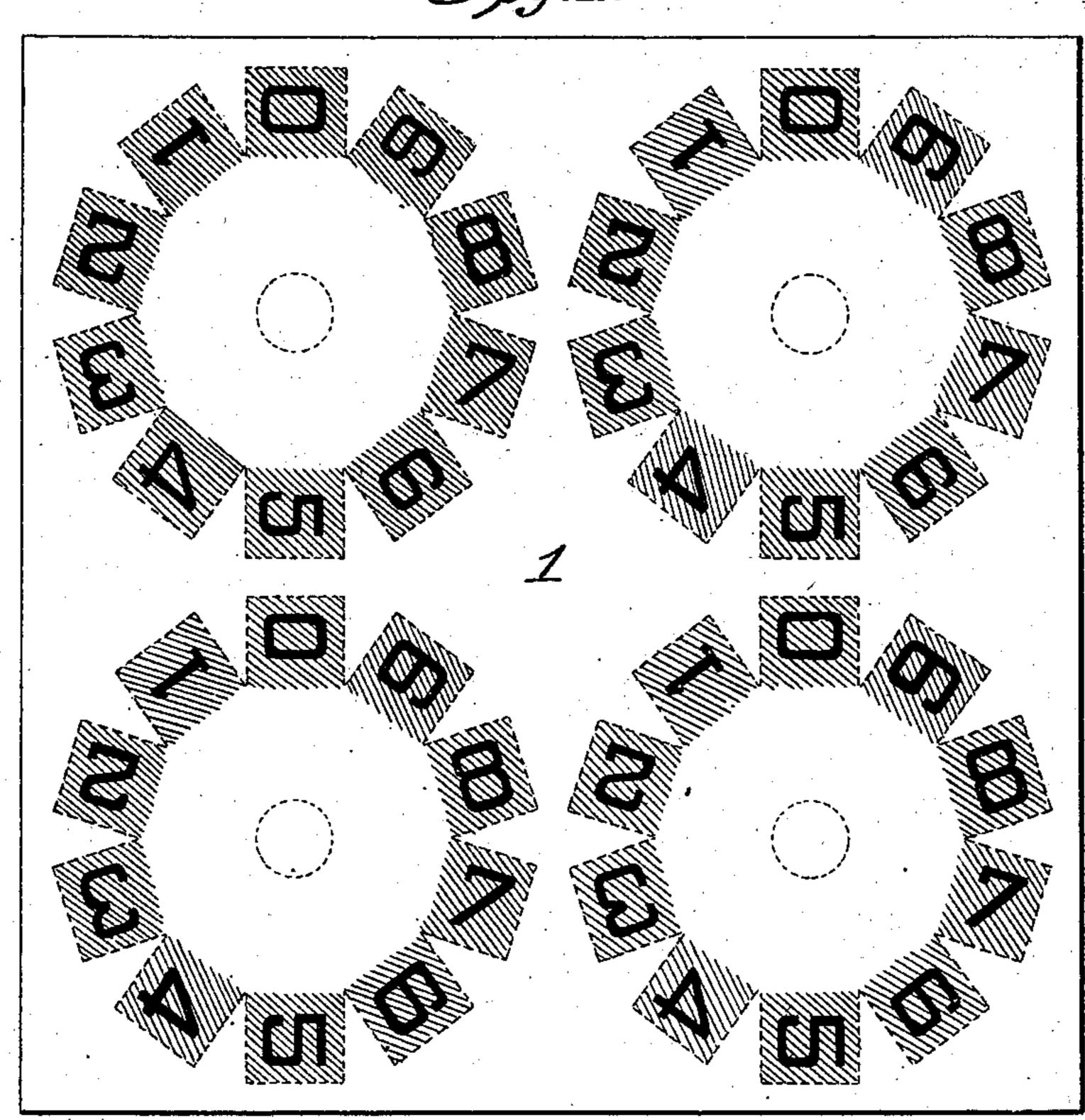
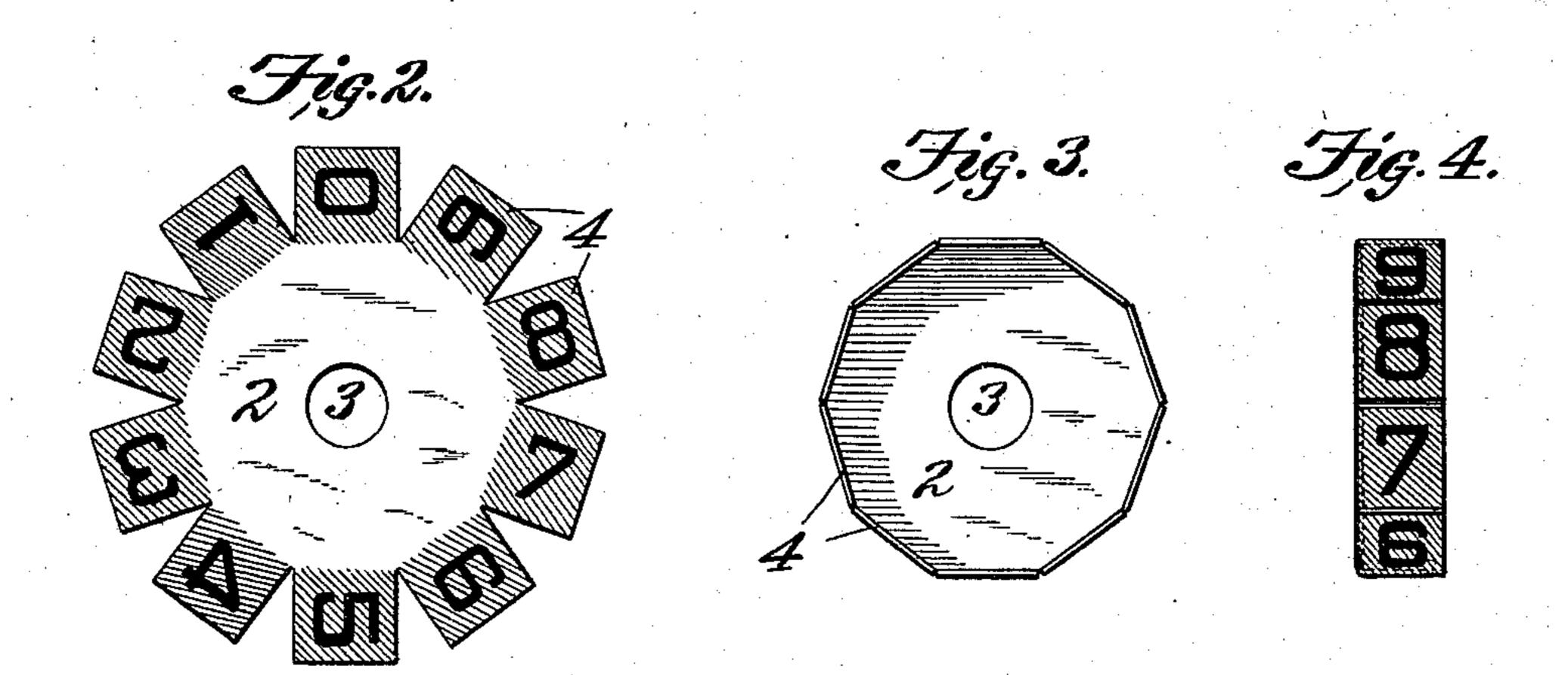
## W. G. KIRCHHOFF. INDICATOR WHEEL. APPLICATION FILED FEB. 24, 1902.

NO MODEL.

Fig.1.





Witnesses: G. a. Pennington Ralph M. ashby. Inventor: Milliam G.Kirchhoff, by Bakwell Conwall Attys.

## United States Patent Office.

WILLIAM G. KIRCHHOFF, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ST. LOUIS REGISTER COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

## INDICATOR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 724,115, dated March 31, 1903.

Application filed February 24, 1902. Serial No. 95,214. (No model.)

To all whom it may concern:

Beitknown that I, WILLIAM G. KIRCHHOFF, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented a certain new and useful Improvement in Indicator-Wheels, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of the blank from which my improved indicator-wheels are made. Fig. 2 is a view of an indicator-wheel stamped from the blank and before it is formed. Fig. 3 is a side elevational view of the formed wheel, and Fig. 4 is an edge elevational view of said formed wheel.

This invention relates to new and useful improvements in indicator-wheels, the object being to produce a wheel simple and economical in construction and possessing both strength and durability, all as will be hereinafter more fully described, and specifically pointed out in the claims.

In the drawings, 1 indicates a blank of sheet metal, which sheet metal forms a base for a coating of enamel, said coating being applied 30 on the sheet metal and treated, such as being baked, as usual. This enamel is applied in such manner that the outline of the ultimate wheel-blank appears in a different color from the background, and on the radial projections 35 extending therefrom appear numbers running consecutively from one to nine, inclusive, together with the zero character "0." After the sheet is enameled and printed, as above described, the wheel-blanks are separately 40 punched out, as shown in Fig. 2. These blanks, as will be seen, consist of a body portion 2, with a centrally-located opening 3 for the passage of a shaft and radial projections

4, bearing the indicating-numerals. This wheel-blank is now subjected to the action of forming-dies, which bend the radial projections at substantially right angles to the plane of the body or web of the wheel, as shown in Figs. 3 and 4, so that the face or periphery of the wheel is made up of a series of facets connected at one edge to the web. These facets bear the numerals and may have their free edges soldered together to produce a rigid structure; but in practice where the sheet metal of which the blank is formed is 55 of sufficient thickness the wheel will stand up sufficiently rigid for all ordinary purposes.

I am aware that many minor changes in the construction, arrangement, and combination of the several parts of my device can be made 60 and substituted for those herein shown and described without in the least departing from the nature and principle of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters 65 Patent, is—

1. An indicator-wheel consisting of a web portion and radiating projections, said projections being bent at substantially right angles to said web portion to form facets extending in line with the axis of said wheel; substantially as described.

2. An indicator-wheel consisting of a web portion and radiating projections integral therewith bent at an angle substantially in 75 line with the axis of said wheel, the edges of said projections bearing against each other to brace them against displacement; substantially as described.

In testimony whereof I hereunto affix my 80 signature, in the presence of two witnesses, this 10th day of February, 1902.

WILLIAM G. KIRCHHOFF.

Witnesses:

GEORGE BAKEWELL, G. A. PENNINGTON.