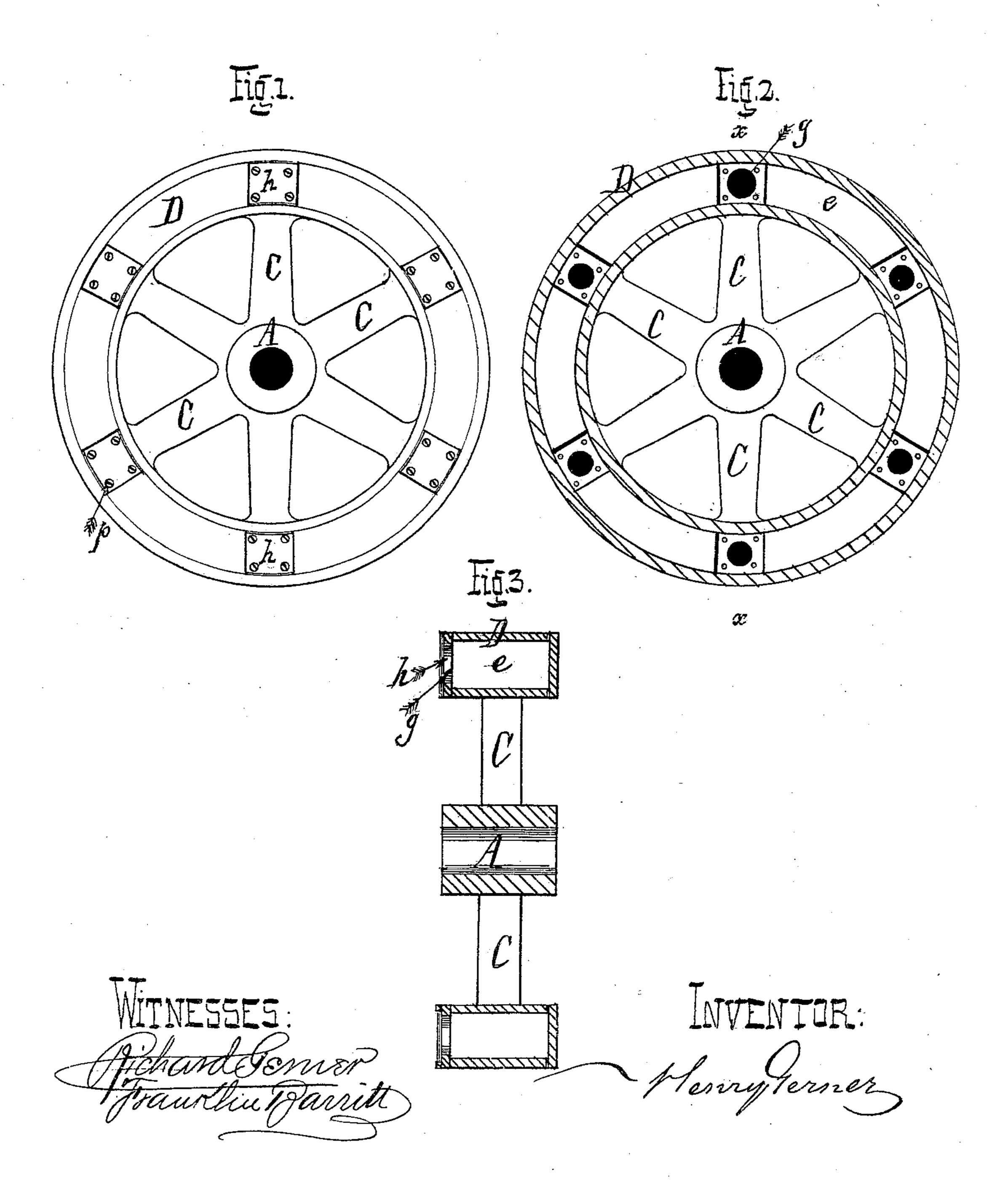
## H. GERNER. Fly-Wheels.

No. 143,009.

Patented September 23, 1873.



## UNITED STATES PATENT OFFICE.

HENRY GERNER, OF NEW YORK, N. Y.

## IMPROVEMENT IN FLY-WHEELS.

Specification forming part of Letters Patent No. 143,009, dated September 23, 1873; application filed September 3, 1873.

To all whom it may concern:

Be it known that I, Henry Gerner, of the city, county, and State of New York, have invented certain Improvements in Fly-Wheels, of which the following is a specification:

The object of my invention is to produce a cheaper and more easily transported fly-wheel than heretofore, and one whose weight may be increased at pleasure. My invention consists in casting the rim or the whole of the wheel hollow, as may be desired, leaving openings in the rim, through which the material used in filling is inserted.

In order more fully to describe my invention, I refer to the accompanying drawing forming a part of this specification.

The same letters refer to like parts.

Figure I is a side view of a wheel embodying my invention. Fig. II is a vertical sectional view of the same. Fig. III is a sectional view through line x x in Fig. II.

A is the hub of the wheel, and C C the

spokes, made in the usual manner; D, the rim, cast hollow, as seen at e e, by which I am enabled to make a much larger wheel with a given amount of material, and after it is transported and set up I am enabled to increase its weight and effectiveness by filling with a lighter or heavier material, as desired, such as sand or lead, &c. After the rim has been filled the holes or openings may be closed by plates, plugs, or screws.

I am aware that fly-wheels have been constructed of two disks and filled with bricks and mortar, &c., and secured by bands or tires; such I do not claim; but

I claim—

As a new article of manufacture, the flywheel D C A, having the rim cast hollow, and with openings g g filling the same, substantially as and for the purposes described.

Witnesses: HENRY GERNER. FRANKLIN BARRITT,

ANTON C. CRONDAL.