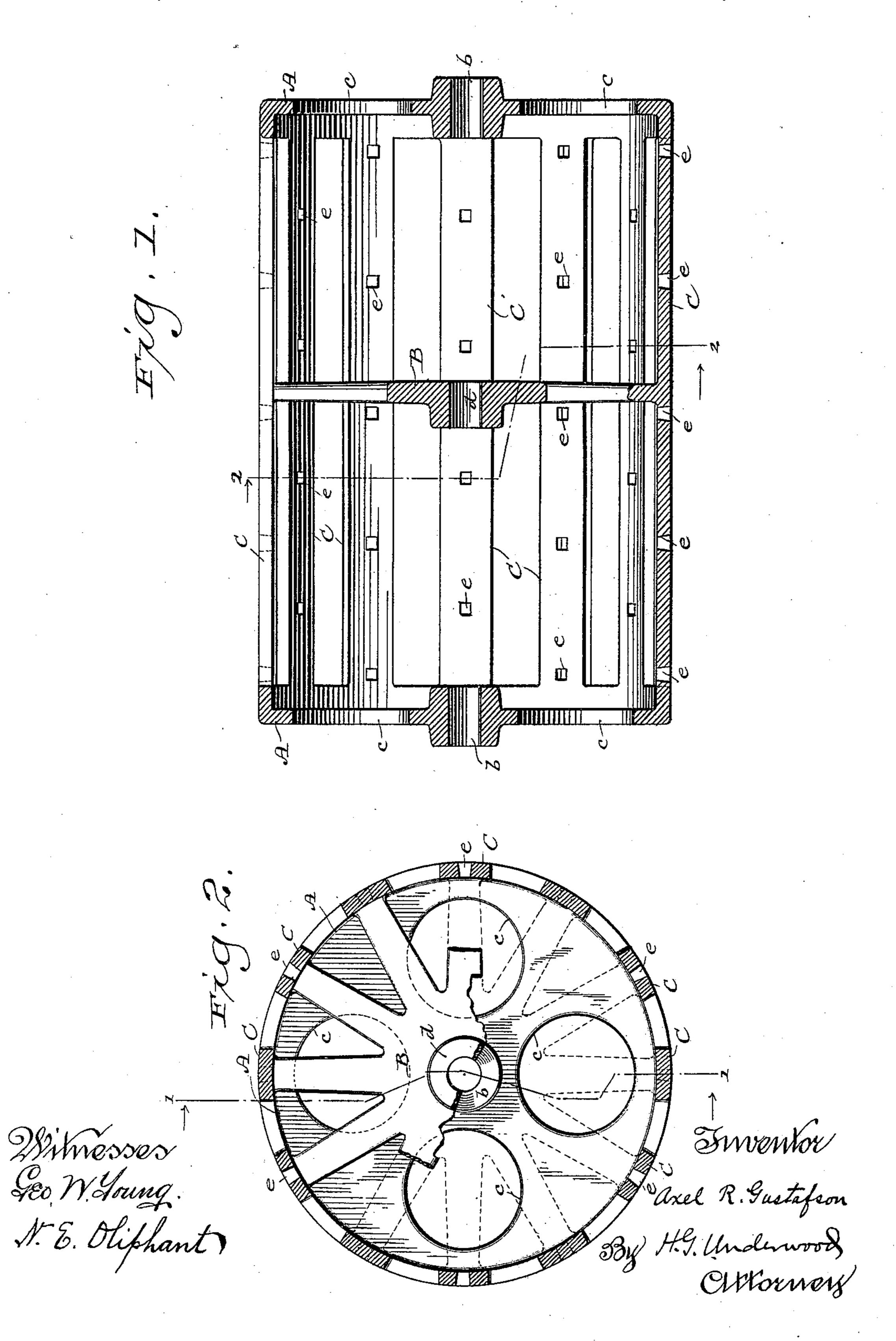
(No Model.)

## A. R. GUSTAFSON. THRASHING MACHINE CYLINDER.

No. 466,098.

Patented Dec. 29, 1891.



## United States Patent Office.

AXEL R. GUSTAFSON, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO WILLIAM F. ANDERSON, OF NEGAUNEE, MICHIGAN.

## THRASHING-MACHINE CYLINDER.

SPECIFICATION forming part of Letters Patent No. 466,098, dated December 29, 1891.

Application filed February 7, 1891. Serial No. 380,570. (No model.)

To all whom it may concern:

Be it known that I, AXEL R. GUSTAFSON, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Thrashing-Machine Cylinders; and I do hereby declare that the following is a full, clear, and exact description thereof.

I machine of comprise a times as head together of amount of invention.

A thrash

My invention relates to cylinders for thrashio ing-machines; and it consists in certain peculiarities of construction to be hereinafter described with reference to the accompanying
drawings, and subsequently claimed.

In the drawings, Figure 1 represents a longitudinal vertical section of a thrashing-machine cylinder constructed according to my invention, the section being taken on line 11 of the succeeding figure; and Fig. 2, a vertical transverse section of the same on line 2 2 of Fig. 1.

Referring by letter to the drawings, A represents the heads of the cylinder, centrally provided with openings b for the insertion of a shaft, and these heads are also provided with apertures c, that not only provide for a saving in metal, but also permit of ready access to the interior of said cylinder. Midway of the heads A is a spider B, that serves as a center brace, and this spider or center brace is also centrally provided with an opening d for the cylinder-shaft.

The heads A and spider B are connected by longitudinal bars C, arranged at regular intervals apart, and each of these bars is provided with a series of openings e for the reception of the shanks of teeth, such as are ordinarily connected to thrashing-machine cylinders.

The heads A, spider B, and longitudinal bars

40 C are all cast from steel in one piece, as is best
illustrated in Fig. 1, and thus I effect a saving
in time, labor, and expense in the manufacture
of the cylinders, especially as the teeth-shank
openings in said bars are formed by suitable
45 cores in the molds for said cylinders, thus obviating the necessity of boring and squaring
up of such openings, as is ordinarily the case,

and it is also to be understood that thrashing-machine cylinders of ordinary construction comprise a considerable number of parts, sometimes as high as forty-two, and the putting together of such a cylinder requires a certain amount of time and labor that is saved by my invention.

A thrashing-machine cylinder constructed according to my invention has been run at a speed of twelve hundred revolutions per minute without bursting, and to overcome the liability of thrashing-machine cylinders to break when running at a high rate of speed is one 60 of the principal objects sought to be accomplished by my said invention.

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

1. As an improved article of manufacture, a skeleton thrashing-machine cylinder comprising two circular heads cast from steel in one piece with a series of connecting toothbars arranged at certain intervals apart, sub- 70 stantially as set forth.

2. As an improved article of manufacture, a skeleton thrashing-machine cylinder comprising two circular heads and a center brace cast from steel in one piece with a series of 75 connecting tooth-bars arranged at certain intervals apart, substantially as set forth.

3. As an improved article of manufacture, a skeleton thrashing-machine cylinder comprising two circular heads cast in one piece 80 with a series of connecting-bars arranged at certain intervals apart, these bars being provided with openings formed by coring the mold for the cylinder, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

AXEL R. GUSTAFSON.

Witnesses:
N. E. OLIPHANT,
WM. KLUG.