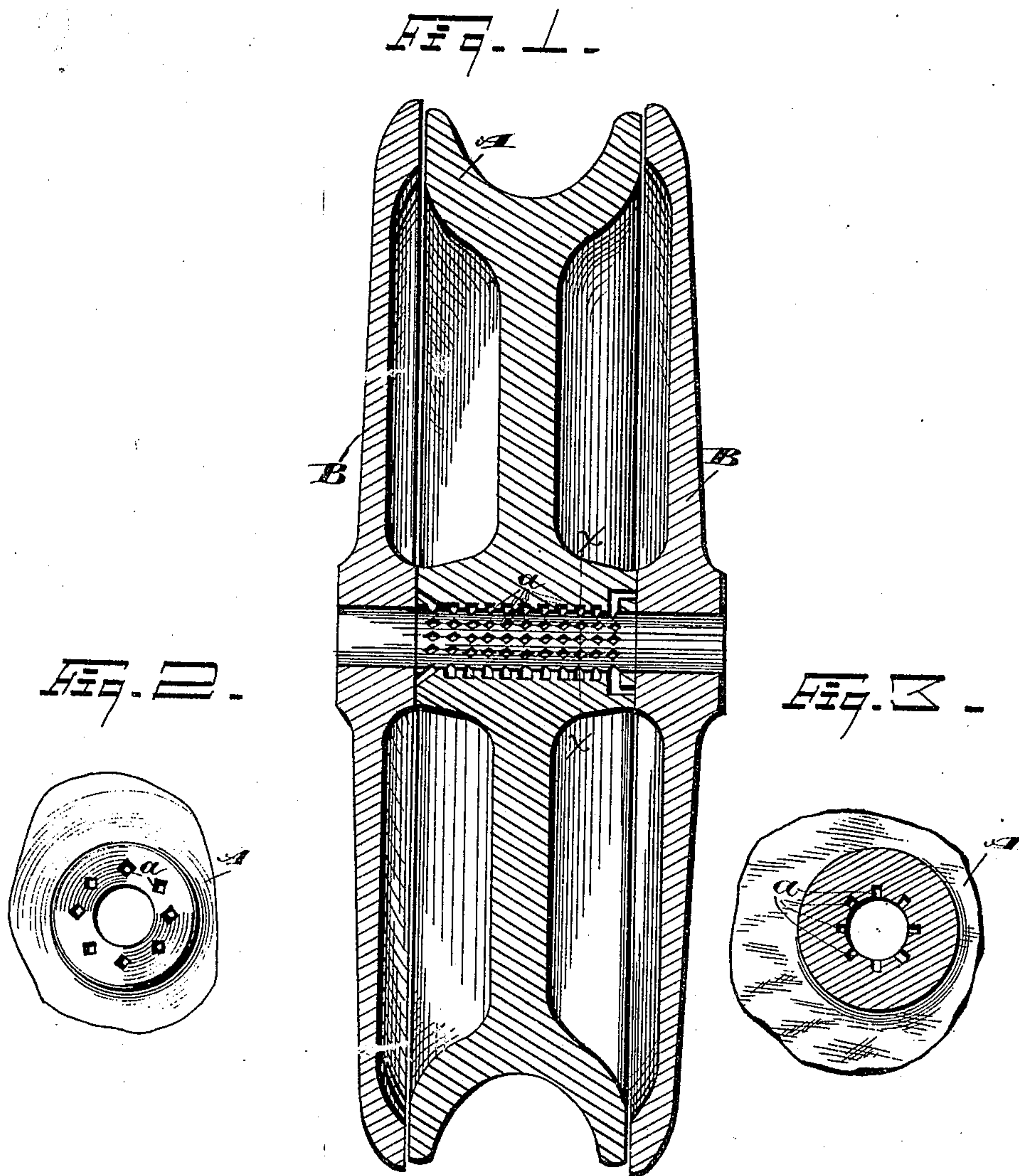


(No Model.)

G. A. FORD.
METAL SHEAVE.

No. 323,136.

Patented July 28, 1885.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE A. FORD, OF CLEVELAND, OHIO.

METAL SHEAVE.

SPECIFICATION forming part of Letters Patent No. 323,136, dated July 28, 1885.

Application filed June 17, 1885. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. FORD, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Metal Sheaves; 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 pertains to make and use the same.

My invention relates to improvements in metal sheaves, the object being to provide in casting the sheaves a series of pockets located around the axial bore of the sheaves, with the outer line of the pocket made angular, so as to be or open on the face of the hub, to the end that graphite or other suitable lubricant may be packed in the pockets to render the sheaves self-lubricating, and without increasing the initial cost of the sheaves.

With this object in view my invention consists in certain features of construction and in combination of parts, hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation in section through the center of the sheaves and casing illustrating my invention. Fig. 2 is an elevation showing the end of the hub of the sheaves. Fig. 3 is an elevation in transverse section on the line of xx , Fig. 1.

A represents the sheave, and B B the casing. In Fig. 1 a section of these parts is shown in position with the axial pin removed. a represents pockets or depressions that are cast in the hub of the sheave around the axial bore. These pockets are filled with some preparation of graphite or other suitable lubricant that is susceptible of being packed firmly. The pockets are so arranged that as the sheave turns on the axial pin every part of the latter is brought in contact with the lubricant. The pockets nearest the respective ends of the hub are made angular, as shown at the right hand in Fig. 1, or curved, if preferred, or set oblique to the axis, as shown at the left hand, so that in either case the pocket has an opening on the face of the hub, thus

lubricating the end of the hub where it comes in contact with the casing.

There is no extra expense in casting a sheave with these pockets, and the cost of filling them with graphite or other suitable lubricant is but trifling.

By this arrangement of pockets, filled as aforesaid, the sheave is self-lubricating and will last a long time without any attention.

I am aware that pulleys and perhaps sheaves have been cast with chambers for containing oil, and with bushing arranged to hold lubricants. Such bushing materially increases the initial cost of the sheave, and the oil is soon exhausted from the said chambers, and has to be renewed often.

I am also aware that journal-bearings made of wood have been provided with recesses or pockets for the reception of a dry lubricant; hence I make no broad claim to such constructions.

What I claim is—

1. A metal sheave having a series of pockets cast therein, arranged around and opening into the axial bore of the sheave, for retaining graphite or other suitable lubricant, substantially as set forth.

2. A metal sheave having a series of pockets cast therein, arranged around and opening into the axial bore of the sheave, the outer pocket also opening through the end walls of the hub of the sheave, substantially as set forth.

3. In a metal sheave, the combination, with a series of pockets cast therein, arranged around and in open relation with the axial bore of the sheave, and the outer pockets opening also through the respective ends of the hub, of graphite or other suitable lubricant packed in said pocket, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 8th day of June, 1885.

GEORGE A. FORD.

Witnesses:

CHAS. H. DORER,
ALBERT E. LYNCH,