(No Model.)

A. J. LAUNDRAY.

STACK BINDER.

No. 333,313. Patented Dec. 29, 1885.

Fig. 2.

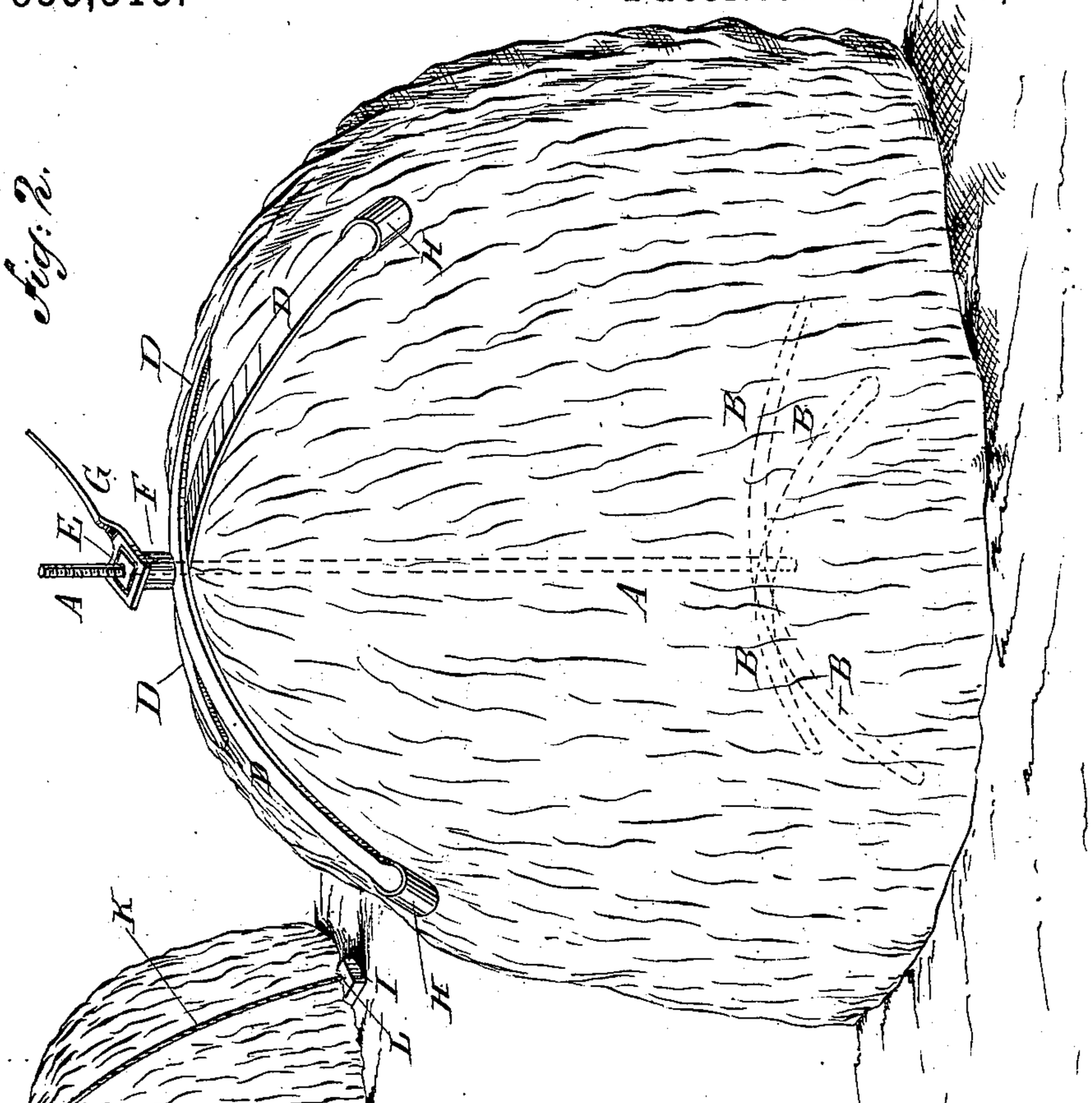

Fig. 4.

Fig. 1.

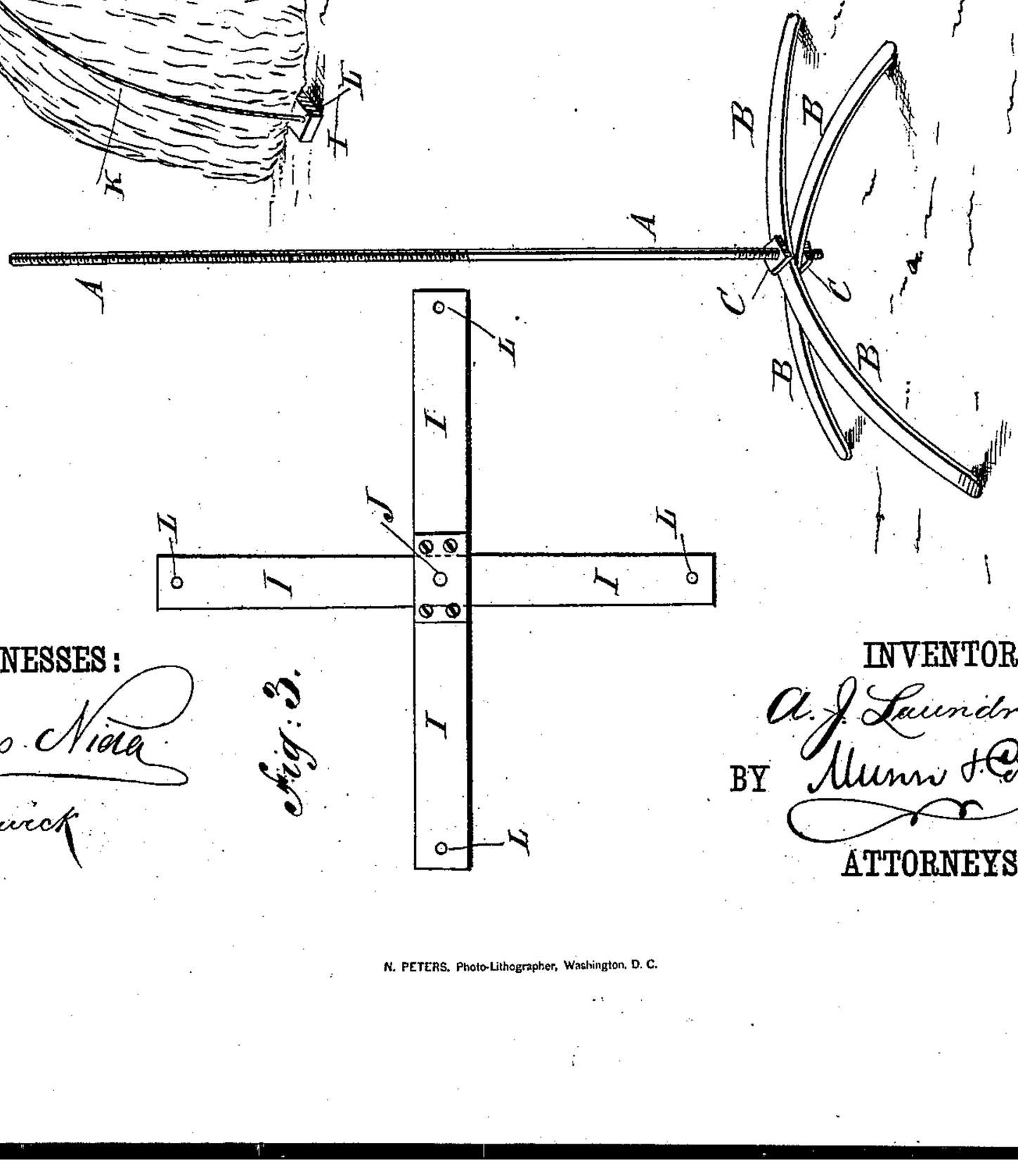

Fig. 3.

WITNESSES:

Chas. Nichols

C. Sedgwick

INVENTOR:

A. J. Laundray

BY Munn & Co

ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ADOLPHUS J. LAUNDRAY, OF CLYDE, KANSAS.

STACK-BINDER.

SPECIFICATION forming part of Letters Patent No. 333,313, dated December 29, 1885.

Application filed March 18, 1885. Serial No. 159,291. (No model.)

To all whom it may concern:

Be it known that I, ADOLPHUS J. LAUNDRAY, of Clyde, in the county of Cloud and State of Kansas, have invented a new and useful Improvement in Stack-Binders, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a part of my improved binder. Fig. 2 is a view illustrating the use of the binder. Fig. 3 is a plan view of another form of foot. Fig. 4 is a view of a method of tying the top of a stack down.

The object of this invention is to provide binders for compressing stacks of hay and grain to cause them to settle squarely and prevent the said hay and grain from being scattered by the wind.

The invention relates to a stack-binder constructed with a rod having a foot attached to its lower end, and provided with arms and a nut and washer, whereby a stack can he compressed by forcing the said arms down upon its top. In the ends of the binding-arms are formed sockets to receive poles to hang down along the sides of the stack, as will be hereinafter fully described and then claimed.

A represents a rod, of any suitable length and of any convenient size, and which may be solid or tubular, as may be desired or convenient. The lower end of the rod A has a screw-thread cut upon it, and is passed through holes in the centers of the arched bars B, which form the foot of the binder, and to which the said rod A is secured by nuts C, screwed upon its lower end above and below the bars B.

D are the binding-arms, which are arched and have holes through their centers to receive the rod A, which has a screw-thread cut upon it to receive the nut E. Between the binding-arms D and the nut E is interposed a washer, F, to prevent the said arms D from being moved out of place by friction from the nut E. The nut E is turned by means of a wrench, G.

In using the binder the rod A is secured to the foot B and the stack is built around the said rod and upon the said foot. When the stack is completed, the arms D are placed upon the rod A upon the top of the stack, the washer F and nut E are placed upon the rod A above the arms D, and the nut E is screwed down by means of the wrench G until the stack has been sufficiently compressed.

In the outer ends of the arms D are formed sockets H, to receive poles, which are allowed to hang down along the sides of the stack when desired.

The foot can be made of wooden bars I, having a nut, J, secured to their centers, so that when the stack has become settled or set after being compressed the rod A can be screwed out of the foot and used for compressing another stack. In this case wires K can be passed over the top of the stack and secured in holes L, formed in the outer ends of the bars I of the foot, as illustrated in Fig. 4.

When long stacks are built, several binders can be used, and in this case poles can be placed upon the top of the stack beneath the ends of the arms D, so that the parts of the stack between the binders can be compressed.

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

1. A stack-binder constructed substantially as herein shown and described, and consisting of the rod A, having foot B, and provided with arms D, and a nut, E, whereby a stack can be compressed by forcing the said arms down upon its top, as set forth.

2. In a stack-binder, the curved binding-arms D, having a socket, H, formed on the outer surface of each end, substantially as shown and described, whereby provision is made for hanging poles down along the sides of a stack, as set forth.

ADOLPHUS J. LAUNDRAY.

Witnesses:
R. F. HERMON,
J. F. RANDOLPH.