

(No Model.)

A. A. NOYES.
HAY STACKER.

No. 294,662.

Patented Mar. 4, 1884.

Fig. 1.

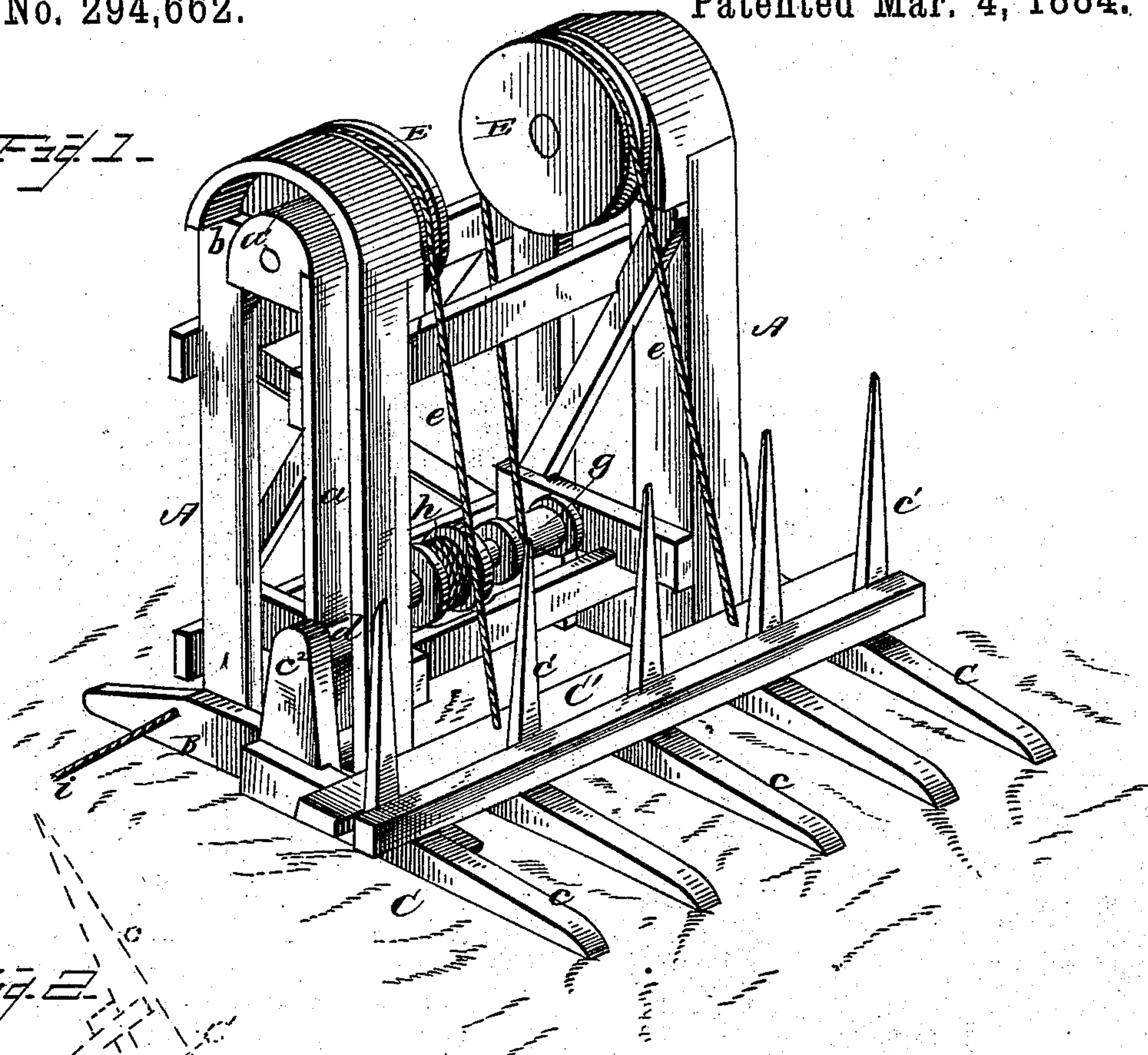
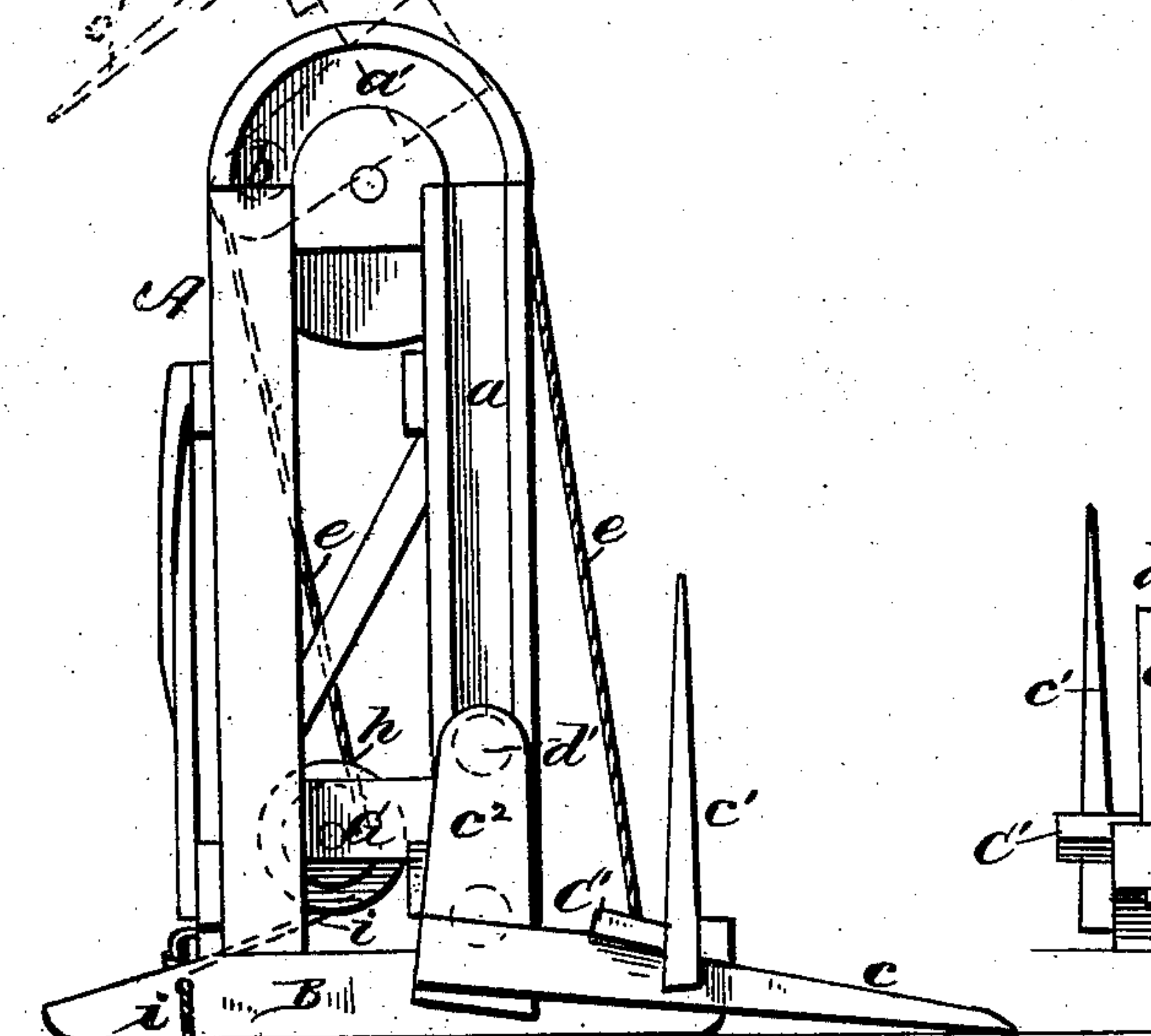


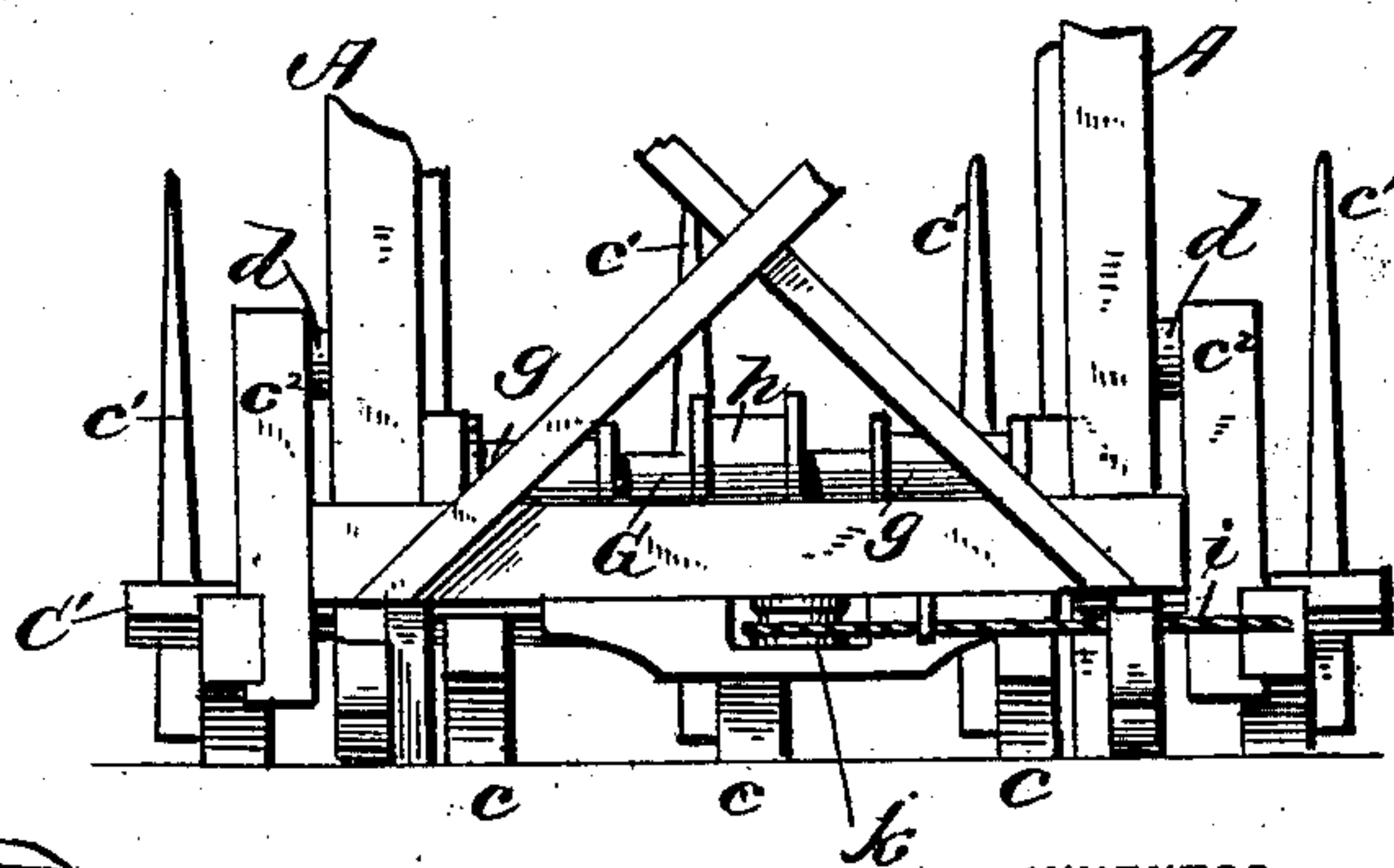
Fig. 2.



WITNESSES

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Fig. 3.



INVENTOR

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ASHBEL A. NOYES, OF STEAMBOAT ROCK, IOWA.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 294,662, dated March 4, 1884.

Application filed December 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, ASHBEL A. NOYES, a citizen of the United States, residing at Steamboat Rock, in the county of Hardin and State of Iowa, have invented certain new and useful Improvements in Hay-Stackers, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a perspective view of my improved stacker, showing the forked elevator down in a position to receive a load of hay to be elevated. Fig. 2 is a side elevation of the stacker, showing the elevator at the top of the frame in a position for discharging the load of hay. Fig. 3 is a rear elevation of the machine.

My invention relates to machines for stacking hay; and it consists, essentially, in certain novel improvements which will be fully understood from the following description and appended claims, when taken in connection with the annexed drawings.

The main frame of the stacker consists of upright portions A A, strongly braced and secured to sled-runners B B. The forward portions of said uprights are grooved, as indicated at *a*, which grooves terminate at their upper ends in semicircular grooves *a'*, having stops *b*.

C designates the elevator, which is composed of horizontal teeth *c*, forming the platform-support for the hay, and perpendicular teeth *c'*, forming a back support for the hay, which teeth are rigidly secured to a head, C', as shown in the annexed drawings. The end platform-teeth of the elevator are extended back, and have upright pieces *c''* rigidly secured to them, on which are anti-friction rollers *d d*, which enter the grooves in the uprights of the main frame and guide the elevator in its movements up and down.

Concentric with the semicircular grooves *a'* at the top of the uprights A, and attached to the inner sides of the latter, so as to rotate freely, are grooved pulleys E E, over which ropes or chains *e e* pass, which are attached securely to the cross-head of the elevator, and

also to flanged pulleys *g g* on a shaft, G, which is located near the base of the main frame. Shaft G has its end bearings in cross-pieces of the uprights A, and at the middle of its length a flanged drum, *h*, is keyed on it. Around the drum *h* is wound a rope or chain, *i*, which is carried off and passed around a horizontal pulley, *k*, and thence through a guide-staple and through one of the sled-runners B B.

The operation of the machine is as follows: The elevator C is fully depressed and loaded with hay, a horse is attached to the rope or chain *i*, and as he walks off the load of hay is raised to the top of the main frame, and as the anti-friction rollers *d* follow the semicircular groove the elevator is tilted and the load is dropped upon the stack. The elevator is then drawn down to the base of the machine for another load. If desired, the machine can be supplied with wheels for convenience in transporting it about.

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

1. In a hay-stacker, the combination of the runners B B, the uprights A A, the grooves *a a'* in these uprights, terminating at stops *b*, the forked elevator, the rear extensions thereof, the pieces *c''*, secured to these extensions, and provided with rollers guided in grooves *a a'*, and means for raising and lowering the said forked elevator, substantially as described.

2. In a hay-stacker, the combination of the uprights A A, the vertical grooves, and the semicircular grooves therein, terminating at stops *b*, the grooved pulleys E E, concentric with the semicircular grooves, and to the upper rounded ends of the uprights A A, the forked elevator, the guide-rollers *d'* thereof, and means whereby the elevator is raised and tilted, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ASHBEL A. NOYES.

Witnesses:

D. W. TURNER,
L. E. CAMPBELL.