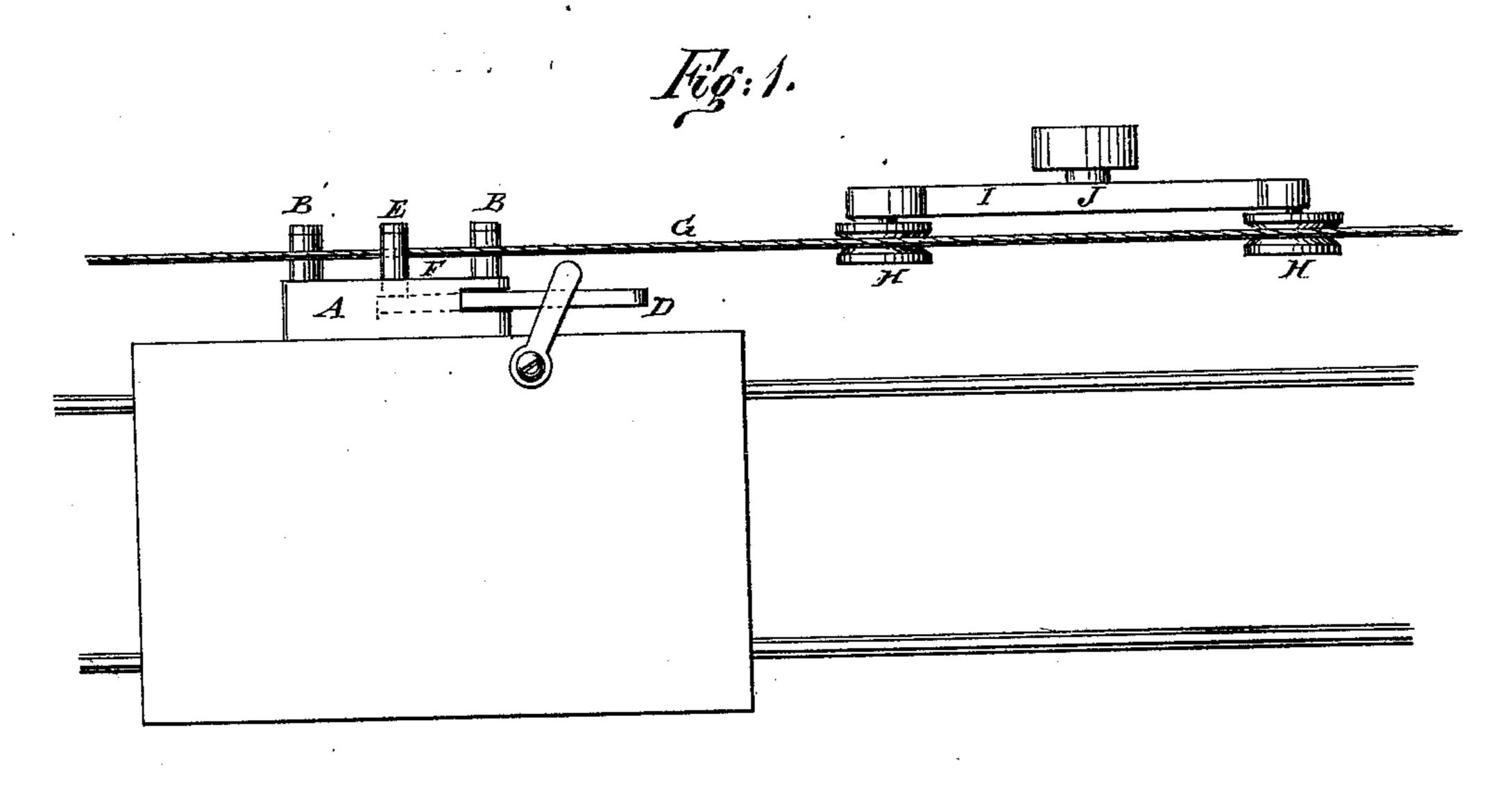
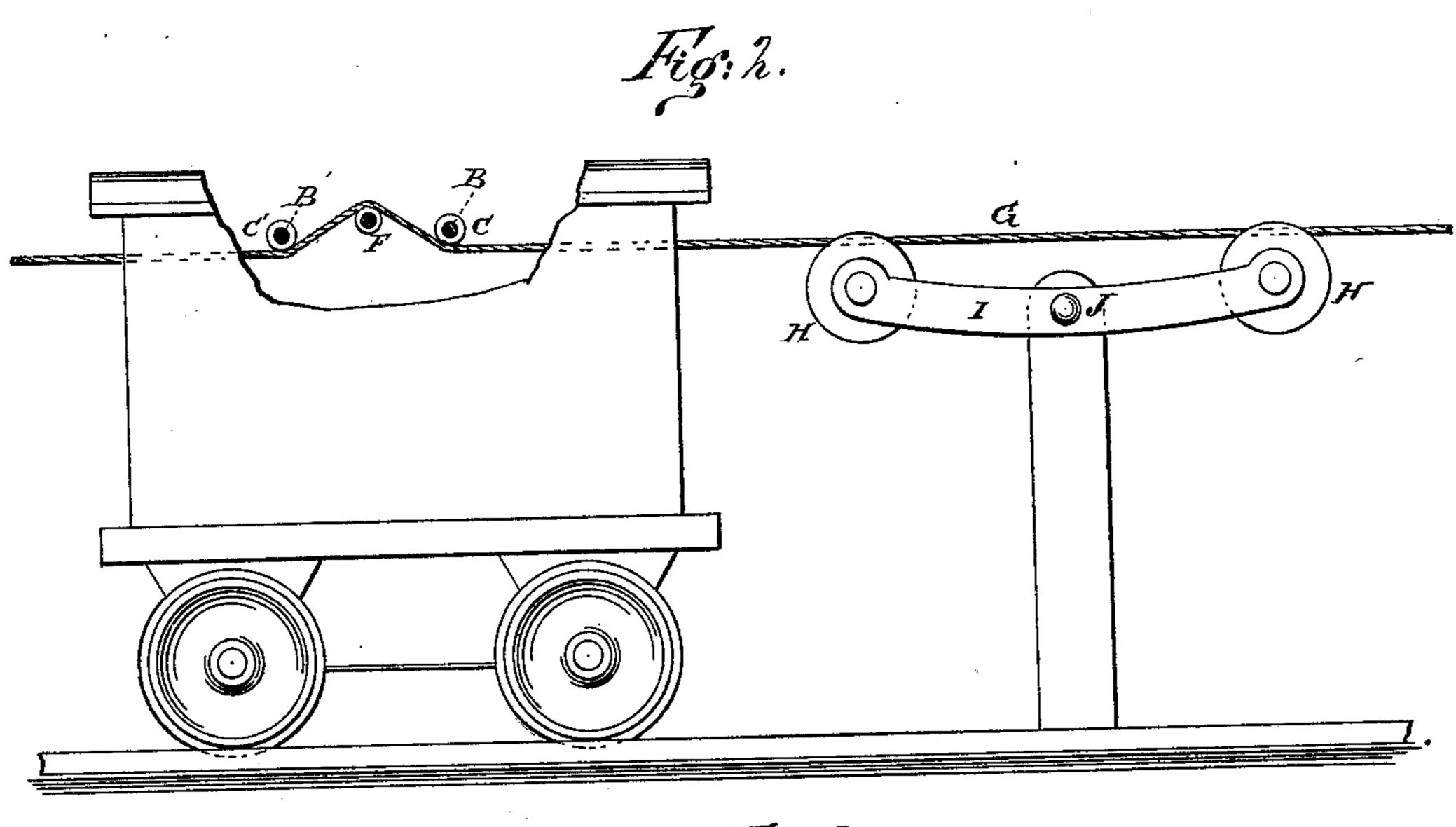
O. H. JADWIN.

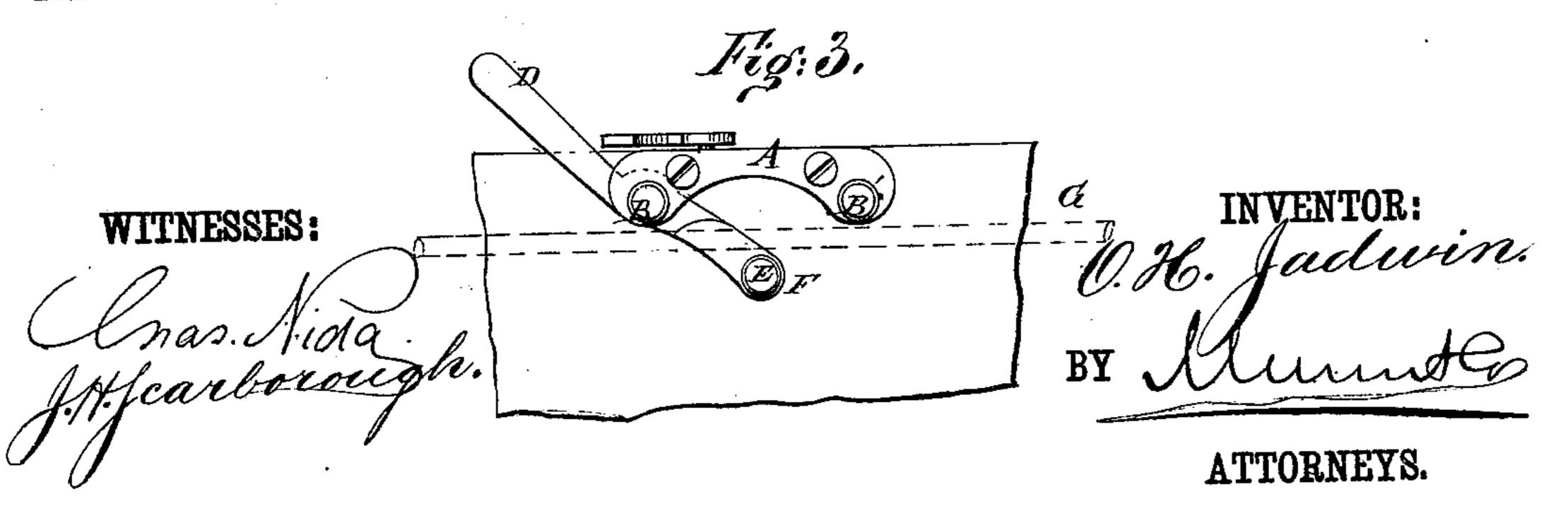
ACCOMMODATING PULLEYS FOR CABLES USED IN PROPELLING CARS, &c.

No. 195,509.

Patented Sept. 25, 1877.







UNITED STATES PATENT OFFICE.

ORLANDO H. JADWIN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ACCOMMODATING PULLEYS FOR CABLES USED IN PROPELLING CARS, &c.

Specification forming part of Letters Patent No. 195,509, dated September 5, 1877; application filed August 3, 1877.

To all whom it may concern:

Be it known that I, ORLANDO H. JADWIN, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Accommodating Pulley for Cables, &c., of which the following is a specification:

The object of this invention is to provide an effective means for the propulsion of cars, boats, or other bodies; and it consists, first, in the manner of connecting and disconnecting the car from the traveling-cable; and, second, in the manner of supporting the cable on accommodating pulleys which allow a knot, swivel, or other bulky obstruction to ride over with ease.

The connection between the car and traveling cable is so made that the cable is not pinched, but simply has its tension increased, so that neither car nor cable receives any sudden jar, as the motion of the cable slipping through imparts the motion gradually until the car has attained nearly the same speed as the cable, at which time the tension is made sufficiently tight to prevent slipping between the friction and tension rollers.

Figure 1 represents a plan showing a car in position. Fig. 2 is a side elevation. Fig. 3 is a detail view of the roller attachment.

Similar letters of reference indicate corresponding parts.

In the case here presented, A represents a casting attached to a car. B B' are stationary wrist-pins, on which loose sleeves or rollers C C' are set. D is a lever, whose fulcrum is at B, as shown in Figs. 1 and 3, and on whose lower end there is a wrist-pin, E, upon which a loose sleeve or roller, F, is set.

It will here be observed that the upper rollers C C' are situated in such position as to

run over the cable G, and the roller F at the base of lever runs under the cable.

G is an endless cable, designed to be kept in constant motion, and is supported at intervals by means of accommodating pulleys H H, whose arm I is pivoted at J, so that as the grappling connection, swivel, or other bulky obstruction comes in contact it will cause the arm to dip as it passes, and the pulley on the opposite end will support and retain the line of cable.

It will thus be seen that by applying a downward pressure gently at first to the lever D, it will cause the roller at its base to lift the cable against the upper rollers C C', and the cable running between gradually imparts motion to the car, and as the pressure on said lever is increased the momentum of the car will be increased until it attains nearly the same speed as the traveling cable.

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

1. The tension-roller F on lever D, in combination with upper rollers C C', as a means for gradually attaching a car, vessel, or other body to a constantly-moving cable, G, in the manner and for the purpose substantially as herein set forth, shown, and described.

2. Pulleys H H, situated on the extremities of arm I, said arm being centrally pivoted at J, forming an accommodating pulley for the support of the cable, substantially as shown and described.

ORLANDO H. JADWIN.

Witnesses:

C. SEDGWICK, ALEX. F. ROBERTS.