(No Model.) 2 Sheets—Sheet 1.

D. B. BAKER & M. LAFFAW.

STEAM TRANSMITTER.

No. 486,019. Patented Nov. 8, 1892.

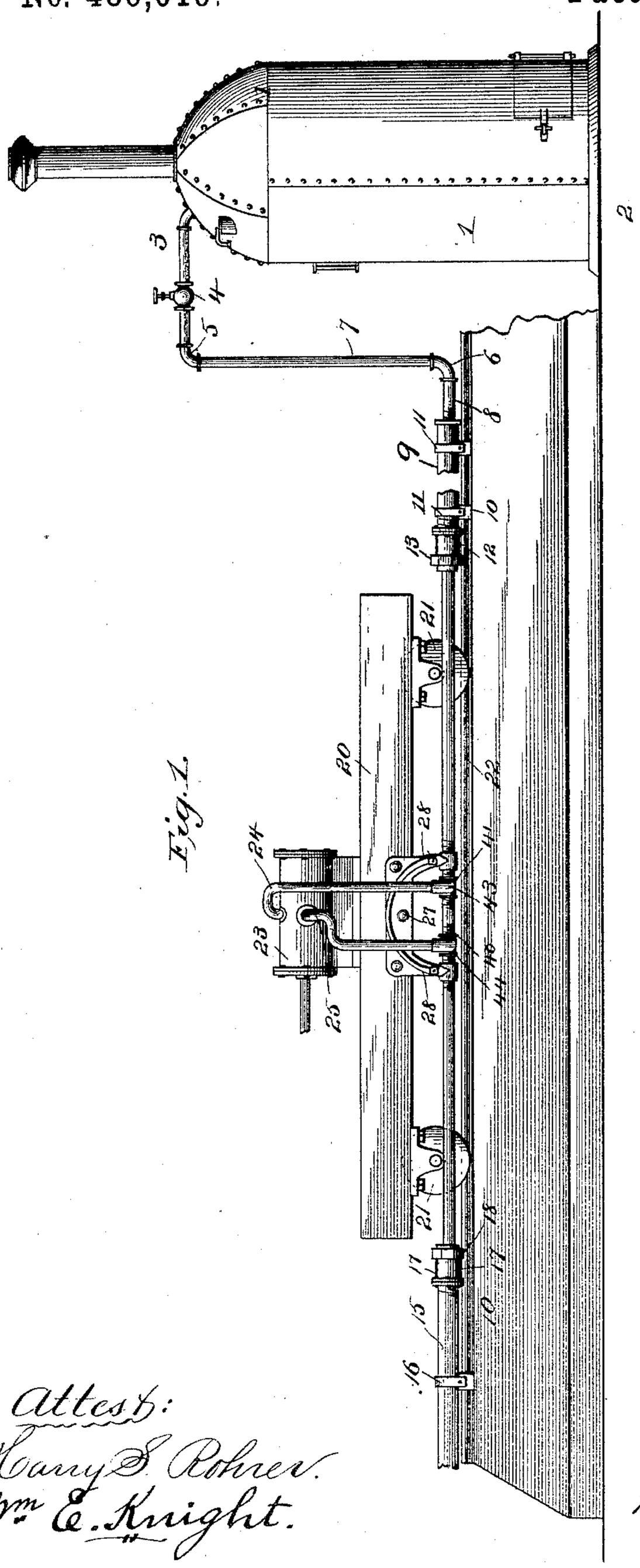

Fig. 1.

Attest:
Harry S. Rohrer.
Wm. E. Knight.

Inventors:
DAVID B. BAKER.
MOSES LAFFAW.
By. Knight Bros
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

D. B. BAKER & M. LAFFAW.

STEAM TRANSMITTER.

No. 486,019. Patented Nov. 8, 1892.

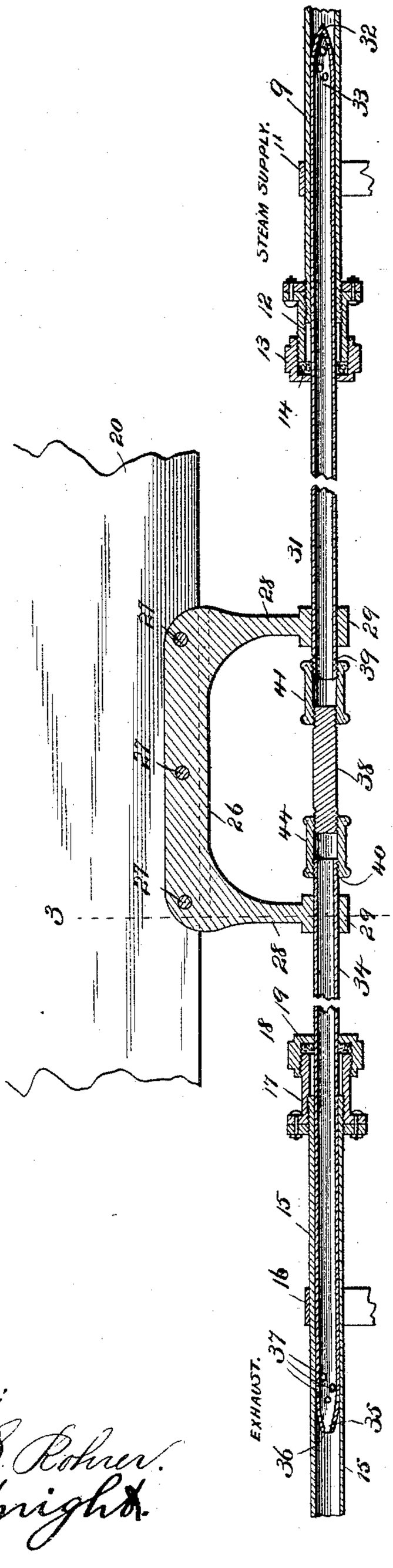

Fig. 2.

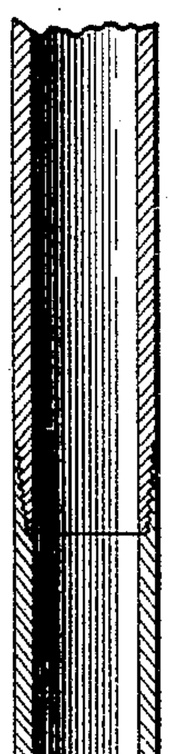

Fig. 4.

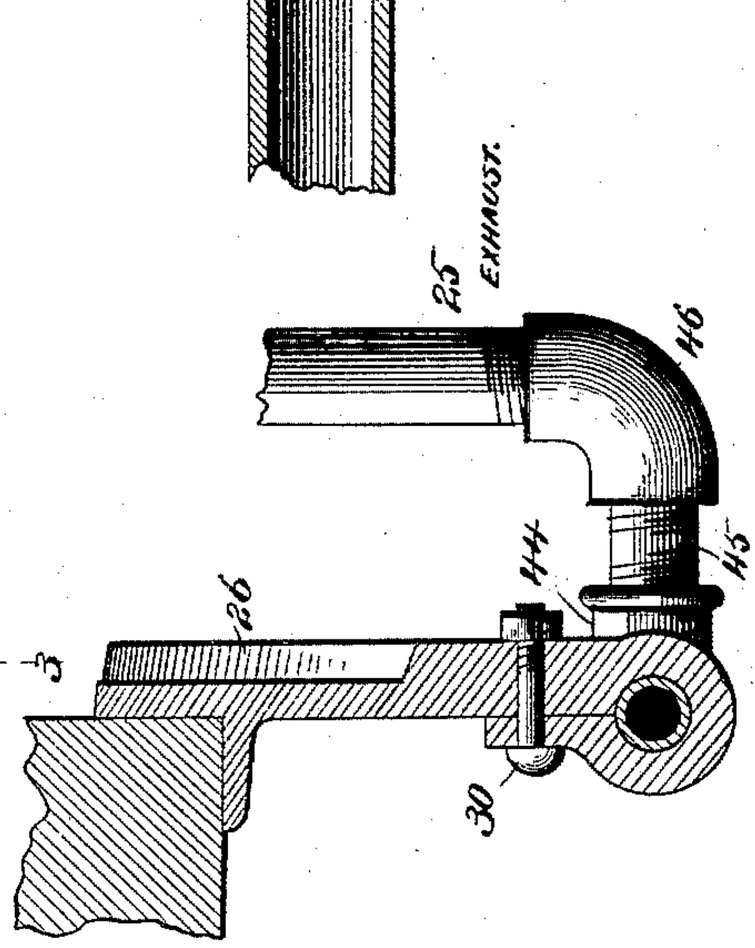

Fig. 3.

Attest:
Harry S. Rohrer.
Wm. E. Knight.

Inventors:
DAVID B. BAKER.
MOSES LAFFAW.
By Knight Bros
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DAVID B. BAKER AND MOSES LAFFAW, OF TACOMA, WASHINGTON.

STEAM-TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 486,019, dated November 8, 1892.

Application filed May 6, 1892. Serial No. 432,078. (No model.)

To all whom it may concern:

Be it known that we, DAVID B. BAKER and MOSES LAFFAW, citizens of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Steam-Transmitters, of which the following specification, taken in connection with the accompanying drawings, which form a part thereof, is a full, clear, and exact description, such as will enable those skilled in the art to make and use the same.

Our invention relates to improved means for transmitting steam from a boiler or generator built upon a stationary base to an engine or other steam-consuming device upon a traveling car or carriage.

Our invention is especially designed to overcome the imperfections of the hose-coupling which is customarily employed for this purpose.

Our invention will be first described with reference to the accompanying drawings, and then more particularly pointed out in the annexed claims.

In said drawings, Figure 1 is a side elevation of a plant, representing a traveling car upon a track and a stationary generator with our improvements applied thereto for conveying the steam from the generator to an engine or other device carried by the car. Fig. 2 is a vertical longitudinal sectional view of our improved transmitter, representing in detail the preferred construction. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is an enlarged sectional view showing the preferred manner of joining the sections of steam-pipe.

1 represents any suitable steam-generator built upon the groundwork 2, and 3 is a steam-supply pipe leading from the dome of said generator.

4 is a suitable globe-valve interposed in the steam-supply pipe 3. 5 and 6 are elbow-couplings connected by the section of steam-pipe 7 and joined, respectively, to the steam-pipe 3 and the coupling-section 8. The ends of the pipes 3, 7, and 8 are screw-threaded into the couplings to allow of the proper adjustment of the parts. 9 is a section of steam-pipe screw-threaded onto the end of the coupling-section 8 and secured to the supporting-base 10 by means of straps or other suitable means 11. The opposite end of this section 9 is provided with a stuffing-box 12, secured thereon, said stuffing-box being provided with the customary follower 13 for confining the packing 14 therein. Upon the opposite end of the base 10 is mounted a section of steam-pipe 15 by means of the straps 16. This section of pipe 15 is provided at its inner end with a stuffing-box 17, secured thereto, said stuffing-box being also provided with a follower 18 for confining the packing 19.

20 is a car or carriage provided with wheels 21, which are run upon the track 22. Mounted upon the carriage 20 at any suitable point for the purpose desired is an engine or other steam consuming or employing device 23.

24 is a steam-supply pipe to said engine, and 25 is an exhaust-pipe therefrom.

26 is a double-armed bracket bolted to the frame of carriage 20 by means of bolts 27, so as to hang vertically therefrom. Each one of the arms 28 of said bracket is formed with a split eye or socket 29, through which and the arm 28 passes a clamping-bolt 30.

31 is a steam-pipe secured in one of the eyes 29 of the bracket 26 and formed with a pointed closed end 32, having perforations 33. Said pipe 31 passes through the stuffing-box 12 into the section 9 and is closely inclosed by the packing 14 to form the steam-joint therewith. The end 32 is contracted or pointed for the purpose of affording sufficient space between the inlets 33 and the steam-supply.

34 is a similar section of the steam-pipe mounted in the other eye 29 of the bracket 26 and extending in the opposite direction from said bracket and passing through the stuffing-box 17 into the section of pipe 15, the packing 19 in this instance closely surrounding said pipe to form a steam-tight joint. The end 35 of this pipe 34 is also contracted and has an opening 36 therethrough and perforations 37 for forming communications between said pipe and the steam-section 15.

38 is a solid coupling-bar formed with screw-threaded ends. The inner ends of each of the steam-pipes 31 and 34 are screw-threaded at 39 and 40, respectively.

41 is a T-coupling screwed onto the end 39 of the pipe 31 and the adjacent end of the solid coupling-bar 38 for securing said steam-

pipe 31 thereto. 42 is a screw-threaded coupling-section extending from said T-coupling 41 and screwed to the elbow 43. The steam-supply pipe 25 extends from said elbow-coupling 43 to the engine.

44 is another T-coupling secured to the threaded end 40 of the steam-pipe 44 and the adjacent threaded end of the solid coupling-section 38 for joining said pipe 34 thereto and for forming communication with the steam-exhaust from the engine.

45 is a threaded coupling extending from the T-coupling 44 to the elbow-coupling 46. The steam-exhaust pipe 25 connects said elbow-coupling 46 with the exhaust of the engine. From this it will be observed that the steam-supply pipe 31 and the exhaust 34 are carried by the car upon which the engine is mounted, so as to afford a constant steam supply and exhaust. The steam-supply section 9 and the steam-exhaust section 15 are stationary upon the frame, said sections being connected, respectively, with the steam-generator and the steam-condenser, if desirable. By this means we are enabled to have a constant steam-supply for the engine on the carriage.

In Fig. 4 we have shown the preferred manner of constructing the steam-pipes, which consists of forming mated screw-threaded ends which fit into each other, so that the outer surface of the sections will come flush with each other and form a continuous smooth pipe.

Our invention is specially designed for conveying steam-power from the stationary steam-generator to the engine on sawmill-carriages, but is broadly applicable to conveying steam to any traveling car or carriage.

Having thus fully described our invention, the following is what we claim as new therein and desire to secure by Letters Patent—

1. In a steam-transmitter, the combination, with a suitable steam-generator and a traveling carriage, of a stationary steam-supply pipe arranged alongside of the traveling carriage and communicating with said steam-generator, a steam-consuming device mounted on the carriage, and a sliding steam-supply pipe for said device, extending longitudinally of the carriage and working in said steam-supply pipe for taking steam therefrom and conveying it to the steam-consuming device, the end of said stationary steam-supply pipe closely surrounding the sliding steam-supply pipe to form a steam-tight joint, substantially as set forth.

2. In a steam-transmitter, the combination, with a suitable steam-generator and a traveling carriage to which steam is to be supplied, of a stationary steam-pipe communicating with said steam-generator and provided with a stuffing-box at its end, a sliding steam-pipe having a perforated contracted end and passing through the said stuffing-box and working in said stationary steam-supply pipe, a bracket mounted on the traveling carriage to which said sliding pipe is secured, and suitable connecting-pipes extending from said sliding steam-pipe, substantially as and for the purpose set forth.

3. In a steam-generator, the combination, with a suitable steam-supply and a traveling carriage to which steam is to be supplied, of a stationary steam-supply pipe communicating with said steam-supply, a stationary steam-exhaust pipe, oppositely-extending sliding steam supply and exhaust pipes carried by the carriage and having sliding steam-tight connection with the stationary supply and exhaust pipes, respectively, a steam-consuming device on the carriage, and suitable connections between the said device and the said sliding supply and exhaust pipes, substantially as and for the purpose set forth.

4. In a steam-transmitter, the combination, with a suitable steam-supply and a traveling carriage, of a stationary steam-supply pipe communicating with the steam-supply, a steam-consuming device on the carriage, a sliding steam-pipe supported from the carriage and having a limited sliding steam-tight connection with the stationary steam-supply pipe and formed with a perforated contracted end, and suitable communication between said sliding steam-pipe and the steam-consuming device on the carriage, substantially as and for the purpose set forth.

5. In a steam-transmitter, the combination, with a suitable steam-supply, a movable carriage, and a steam-consuming device on the carriage, of the stationary steam-supply pipe communicating with the steam-supply, the stationary steam-exhaust pipe, the oppositely-extending sliding steam supply and exhaust pipe having sliding connections with the stationary steam supply and exhaust pipes, respectively, the bracket supported from the carriage and having the sliding steam supply and exhaust pipes secured thereto, the solid coupling-rod connected to the ends of said pipes, and the branch supply and exhaust pipe communicating, respectively, between the steam-consuming device on the carriage and said sliding steam supply and exhaust pipes, substantially as and for the purpose set forth.

DAVID B. BAKER.
MOSES LAFFAW.

Witnesses:
A. A. KNIGHT,
C. H. CORY.