tially as set forth. 8th. In a shell loading machine, the combination of an operating shaft having an arm secured thereto, a pulley loosely mounted upon said shaft, a member pivoted upon said arm and adapted to engage the pulley, a shell carrier, means for operating same, and means connected with said carrier, and operating in unison therewith, for engaging said pivoted member and disconnecting the pulley and arm, substantially as set forth. 9th. In a shell loading machine, the combination of an operating shaft having an arm secured thereto, a pulley loosely mounted unon shaft having an arm secured thereto, a pulley loosely mounted upon said shaft, a trip member pivoted upon said arm and engaging a shoulder formed on said pulley, a shell carrier, means for operating same, said carrier capable of displacement relatively to its operating same, said carrier capable of displacement relatively to its operating. means, a reciprocating trip member connected with said carrier, operating in unison therewith and normally projecting into the plane of said first trip member excepting when in the same longiudinal vertical plane on the same side of the driver center therewith, substantially as set forth. 10th. In a shell loading machine, the combination of a loading tool, mechanism for operating same, a shell carrier and shell support, and means for operating said carrier, said support provided with means for securing the end of an inverted shell, and said carrier adapted to secure the opposite end of said shell on the operation of said loading tool upon such shell, whether tilly are a first large and loading mechanism the or said shell on the operation of said loading tool upon such shell, substantially as set forth. 11th. In a shell loading machine, the combination of a loading tool, mechanism for operating same, a shell carrier and shell support, and means for operating said carrier, said support provided with an aperture and means for securing the end of an inverted shell in said aperture on the operation of said loading tool upon such shell, substantially as set forth. 12th. In a shell loading machine, the combination of a loading tool, mechanism for operating same, a shell carrier and a shell support, means for operating said carrier, said support provided with an aperture, and a plug for securing the end of an inverted shell in said aperture upon the downward movement of said loading tool upon such shell, substantially as set forth. 13th. In a shell loading machine, the combination of operating mechanism, a loading tool, a shell carrier, a shell support having a conical opening for receiving the open end of a shell, and a plug for securing said end in said opening and for preventing the operation of the carrier, substantially as set forth. 14th. In a shell loading machine, the combination of driving means, a series of loading devices, a shell carrier for subjecting the shells successively to the operation of said devices, mechanism for oper-ating the latter and the carrier, trip mechanism for disconnecting the driving means from the loading device operating mechanism, means for securing the open end of an inverted shell while held in said carrier, whereby the movement of the latter is interrupted and said trip mechanism rendered operative, substantially as set forth. 15th. In a shell loading machine, the combination with wad feeding means for feeding the wads in a column with their curved sides contiguous, of wad transferring means, said means adapted to compress the wad column, substantially as set forth. 16th. In a shell loading machine, the combination with a tube for feeding wads in a column, of a lever vibrating at the end of said tube and provided with a receiving recess and an arresting face adjacent to said recess, the latter being of a depth such that the wads in entering travel a distance greater than the wad diameter, whereby said wad column is compressed by said arresting face, substantially as set forth. 17th. In a shell loading machine, the combination of a paper punch, strip freeding means, and a printing device for automatically printing upon the strip before the operation of the punch thereon, substantially as set forth. 18th. In a shell loading machine, the combination of a paper punch, strip feeding means and a printing device for printing upon the strip before the operation of the punch thereon, said printing device adjustable longitudinally relatively to said punch, substantially as set forth. 19th. In a shell loading said punch, substantially as set forth. 19th. In a shell loading machine, the combination of a driven feed roll, a rocker arm and a compression roll mounted upon said arm, the latter bearing upon said driven roll, substantially as set forth. 20th. In a shell loading machine, the combination of a driven feed roll, a rocker arm and a machine, the combination of a driven level roll, a rocker arm and a compression roll mounted upon said arm, the latter provided with a spring pressed bolt bearing upon said driven roll and adapted to press the compression roll thereon, substantially as set forth. 21st. In a shell loading machine, the combination of a driven feed roll In a shell loading machine, the combination of a driven feed roll provided with peripheral indentations, a rocker arm, and a compression roll mounted upon one end of the said arm, the other end of the latter adapted to engage said indentation, substantially as set forth. 22nd. In a shell loading machine, the combination of a driven feed roll provided with peripheral indentations, a rocker arm, and a compression roll mounted upon one end of said arm, the other end of the latter provided with a spring pressed bolt adapted to engage said indentations, substantially as set forth. 23rd. In a shell loading machine, the combination of a shell carrier, means for inserting same means for loading shell with shot, means for insertoperating same, means for loading shell with shot, means for inserting a wad upon such shot, a movable covering plate, and means for moving said plate to cover such shell during its transfer from said shot loading to said wad inserting means, substantially as set forth.

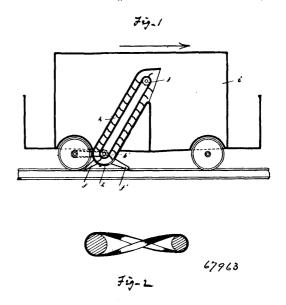
No. 67,963. Means of Cleaning Tramway Rails.

(Moyen de nettoyer les rails de chemin de fer.)

Otto Michaelis, Berlin, Germany, 4th July, 1900; 6 years. (Filed 18th June, 1900.)

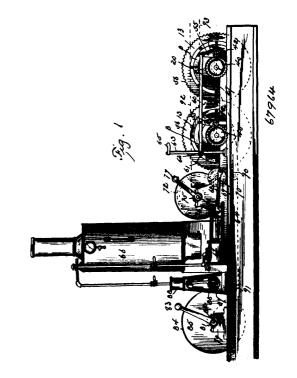
Claum.—1st. A scavenger car for cleaning the grooves of trainway

and two scoops arranged in opposite directions adapted to feed the material taken from the rail grooves to the said carrier band, in the



manner and for the purpose substantially as described. 2nd. In the device covered by claim 1, the arrangement of a crossed belt to drive the carrier in the same direction when the motion of the car is reversed. 3rd. In the device covered by claim 1, the combination of a slide adapted to cover the scoop opening which is not operative when the car is running, in the manner and for the purpose substantially as described.

No. 67,964. Logging Machine. (Machine à manier les billots.)



Edward Turney, Portland, Oregon, U.S.A., 4th July, 1900; 6 years. (Filed 16th June, 1900.)

claim.—1st. In a logging machine, the combination with a winding drum and a slack drum, of a cable wound upon the winding drum and fixed to the slack drum, and independent means for positively rotating the drums. 2nd. In a logging machine, the combination with a winding drum and a slack drum, said winding drum being adapted to receive a cable and pass it to the slack drum to be wound thereon of independent means for positively rotating rails having a carrier band which runs always in the same direction to be wound thereon, of independent means for positively rotating