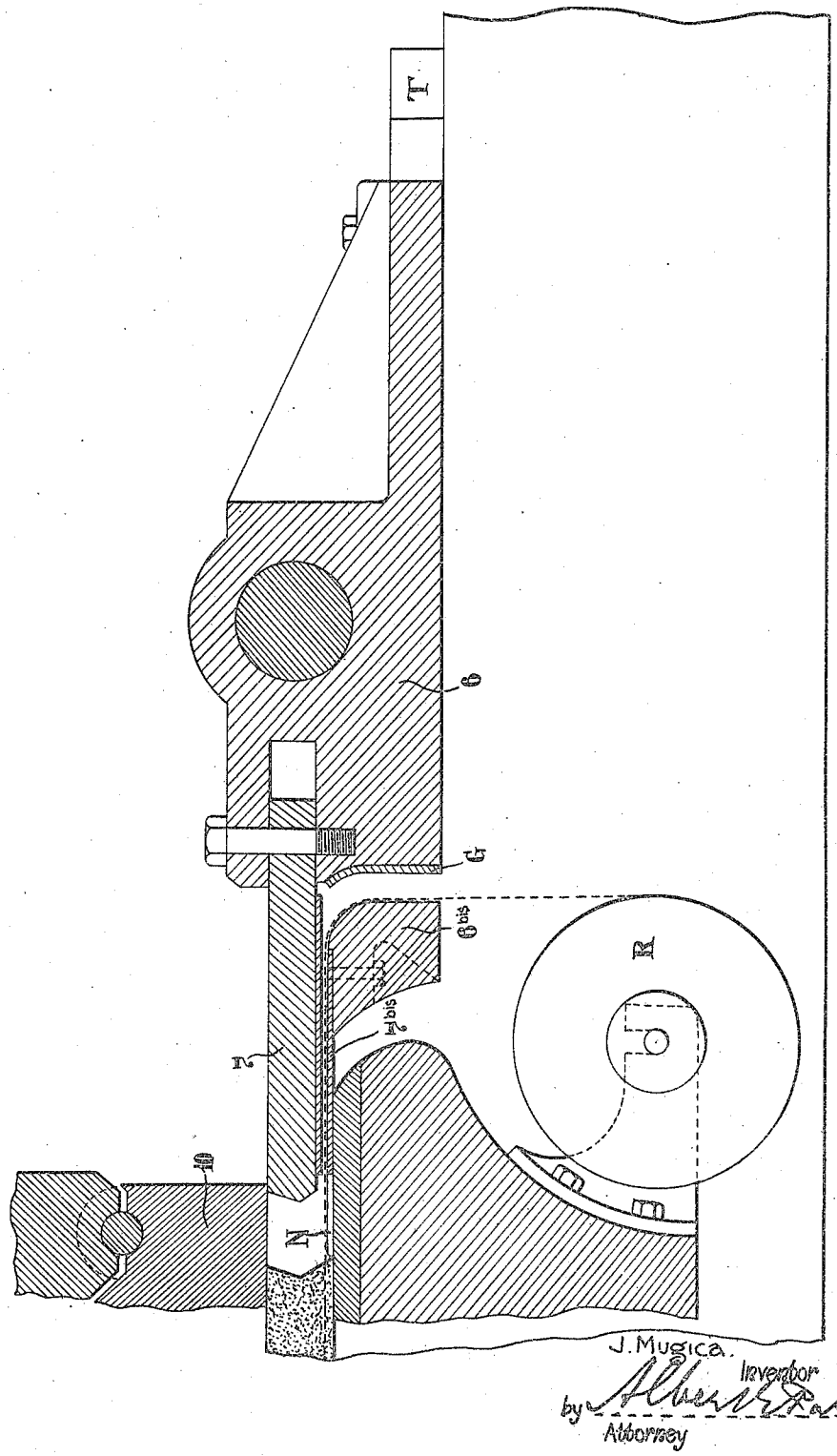
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APPARATUS FOR THE MANUFACTURE OF CONTINUOUS REINFORCED STRIPS OF ASPHALT.

APPLICATION FILED SEPT. 13, 1916.

1,266,846. Patented May 21, 1918.



UNITED STATES PATENT OFFICE.

JUAN MUGICA, OF SAN SEBASTIAN, SPAIN.

APPARATUS FOR THE MANUFACTURE OF CONTINUOUS REINFORCED STRIPS OF ASPHALT.

1,266,846. Specification of Letters Patent. Patented May 21, 1918.

Application filed September 13, 1916. Serial No. 119,837.

To all whom it may concern:

Be it known that I, JUAN MUGICA, a subject of the King of Spain, and residing at No. 9 Calle Miracruz, San Sebastian, Spain, have invented certain new and useful Improved Apparatus for the Manufacture of Continuous Reinforced Strips of Asphalt, of which the following is a specification.

This invention relates to improvements in apparatus for the manufacture of reinforced slabs.

In the specification of my application for Letters Patent, Serial No. 850,064, I have described an improved process and apparatus for the manufacture of continuous strips of compressed asphalt reinforced with wires during the process of manufacture.

The present invention has now for its object to provide an improved apparatus of that kind for the purpose of reinforcing continuous strips of compressed asphalt with metal fabric whereby the operation of manufacture is considerably facilitated, and the installation is greatly simplified.

This invention will now be more particularly described with reference to the accompanying drawing which is a partial vertical longitudinal section of the improved apparatus.

As shown, for the purpose of reinforcing the strips of asphalt with metal fabric, the compressing piston is divided into two parts, namely, an upper part 7 and a lower part 7^{bis}. The upper part 7 which is fixed to the carriage 6, is the main and compressing part of the piston exerts the greater pressure. The lower part 7^{bis} consists of two steel plates between which the metal fabric is arranged to pass, and which enable the wire netting or metal fabric to remain taut and in place during the process of compression of the powdered asphalt by the upper part 7 of the compressing piston. At the forward end of the lower steel plate a number of ribs N having the shape of a comb are arranged for the purpose of preventing the metal fabric from being forced down by the pressure exerted on the powdered asphalt. The lower part 7^{bis} of the compressing piston is fixed to the separate carriage 6^{bis} and is actuated by the latter. The carriage is situated in the path of the carriage 6, so that it is pushed forward on encountering the latter.

The metal fabric is unwound from a drum R situated under the framing of the press, and it enters between the two carriages 6 and 6^{bis}. Thence the metal fabric passes between the two steel plates of the parts 7^{bis} of the compressing piston and then reaches the asphalt mass. In the drawing the carriage 6^{bis} is shown in the extreme right hand position.

The carriage 6, in its forward movement, pushes the piston 7 against the powdered asphalt contained in the press, until the compressed asphalt mass commences its forward movement into the interior of the press; at this instant, that is, when the powdered asphalt has been sufficiently compressed the carriage 6 strikes the carriage 6^{bis} and starts pushing it forward. From that instant onward the upper and lower parts 7 and 7^{bis} of the compressing piston, together with the asphalt compressed in the press, and the metal fabric which constitutes the reinforcement of the strip which is embodied in the asphalt mass, are pushed simultaneously forward.

During the return movement of the carriage 6, the carriage 6^{bis} remains at rest until the carriage 6 strikes against stops provided on the carriage 6^{bis} and moves the latter along with it into its initial position. The carriage 6 is provided on its surface where it comes in contact with the carriage 6^{bis} with a covering of rubber for the purpose of preventing damage to the metal fabric.

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

1. In a machine for the manufacture of reinforced slabs from granular or plastic material, a feed device for advancing the material comprising a plunger, a passage in the plunger for the lengthwise movement of the reinforcing material therethrough, a holder for the plunger having a gripping surface for the reinforcing material, a reciprocating member slidable relatively to the plunger and having a gripping surface for the reinforcing material corresponding to the gripping surface on the plunger holder, and means whereby the gripping surfaces coöperate to grip the material during the forward movement of the plunger.

2. In a machine for the manufacture of reinforced slabs from granular or plastic material, a feed device comprising a plunger, consisting of upper and lower members

spaced sufficiently apart to form a passage for the reinforcing material through the plunger, the lower member being movable relatively to the upper member, each of the members of the plunger having separate gripping members secured thereto and forming a continuation of the passage for the reinforcing material at the inner end of the plunger, a stock holder for the reinforcing material adjacent the passage in the plunger, and means whereby the gripping members coöperate to grip the reinforcing material during the forward thrust of the plunger and relax the grip during the backward movement thereof.

In testimony whereof I have signed my name to this specification.

JUAN MUGICA.

Witnesses:
GREGERO M. MINID,
JAMES S. BOURKE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."