

Vol. XV.-No. 6.

JUNE, 1887.

Price in Canada \$2.50 per An. United States - \$2.50

## CONTENTS.

Inventions Patented	275
LLUSTRATIONS	
INDEX OF INVENTIONS	
INDEX OF PATENTEES	

# INVENTIONS PATENTED.

NOTE-Patents are granted for 15 years. The term of years for which the fers have been paid, is given after the date of the patent.

No. 26,567. Comb Foundation Fastening Machine. (Machine à assujétir les croisées desruches.)

Edward S. Eden, Woodstock, Ont., 2nd May, 1887; 5 years.

Claim.—1st. The combination, in a comb foundation fastener, of the heating lamp B, with an iron plate C, substantially as and for the purpose hereinbefore set forth. 2nd. In a comb foundation fastening machine, the combination of a heated plate C, with a section holder H and horizontal sliding table F, substantially as and for the purpose hereinbefore set forth.

No. 26,568. Art of Reducing the Point in Carbon in Steel and Forming a Homogeneous Weld. (Art de réduire le point de carbone dans l'acier et faire une soudure homogène.)

Elam I. Wassell, (assignee of Edwin D. Wassell), Pittsburgh, Penn., U.S., 2nd May, 1887; 5 years.

Liam I. Wassell, (assignee of Edwin D. Wassell), Pittsburgh, Penn., U.S., 2nd May, 1887; 5 years.

Claim.—1st. The process herein described for treating steel to reduce the point in carbon, which consists in subjecting it to the action of molten slag while immersed or buried therein, substantially as described. 2nd. The process herein described for treating wrought metals to form a homogeneous weld, which consists in subjecting a pile, fagot, bloom, or ingot of metal to the action of molten slag while immersed or buried therein, substantially as described. 3rd. The process herein described for treating steel to reduce the point in carbon and form a homogeneous weld, which consists in subjecting a pile of bars, tubes, or plates, a fagot, or ingot to the action of molten slag while immersed therein, substantially as described. 4th. The process herein described for treating steel rails to reduce the point in carbon, and convert them into bars low in carbon, which consists in subjecting a steel rail, or a section or sections of rails to the action of molten slag and then reducing the rail to bars, substantially as described. 5th. The process herein described for treating steel to reduce the point in carbon, which consists in heating a body of steel in an ordinary furnace, and then subjecting it to the action of molten slag while dipped, immersed or buried therein, substantially as described. 6th. The process herein described for treating wrought metals to form a homogeneous weld, which consists in heating a pile, bloom, or fagot, in an ordinary furnace, and then subjecting it to the action of molten slag while immersed or buried therein, substantially as described. 7th. The process herein described for treating steel to reduce the point in carbon, which consists in heating slag to a state of liquifaction, and then dipping, immersing, or burying the steel in said slag, and subjecting it to the action of the slag until the point in carbon has been reduced to any desired degree, substantially as described.

No. 26,569

No. 26,569. Portable Safe. (Coffre-fort portatif.)

The Woodruff Portable Safe Company, (assignee of Horace W. Woodruff), Cincinnati, Ohio, U.S., 2nd May, 1887: 5 years. Claim.—1st. The method or improvement in the art of transmitting money or valuables from place to place, consisting essentially in enclosing said valuables in a secure box or packing case, through which a window permits them to be visible while en route, substantially as and for the purpose described. 2nd. A portable safe for transmitting money or valuables, provided with a secure transparent opening, through which its contents are visible, and a lock which can only be opened by one acquainted with the key-number or combination, substantially as described. 3rd. A portable safe for transmitting money or other valuables, constructed in two parts one fitting within the other, and securely locked together and having a certain part transparent for the purpose of making the contents visible, substantially as described. 4th. A portable safe for transmitting valuables, one side or portion of which is transparent, in combination with a combination lock so arranged that the key-number may be changed by simply changing the order of the numbers, substantially as described. 5th. A portable safe for transmitting valuables, constructed in two parts one fitting within the other and locked together, the inner casing provided with a glass or transparent window, and the other casing being out away so as to expose said window to view, substantially as described. 6th. A portable safe for transmitting money or other valuables, and provided with a transparent portion through which the contents are visible, substantially as described. 7th. A portable safe for transmitting money, constructed with a transparent part for exposing the contents, said transparent portion being protected by an outer grating, substantially as described. 8th. A portable safe having a transparent portion for the purpose described, provided with a cirumferential groove or depression to receive the encircling cord or ribbon for sealing the safe, substantially as and for the purpose described. ting money or valuables from place to place, consisting essentially

#### No. 26,570. Hot Water Radiator.

(Calori)ère à eau.)

Joseph D. Barcelow and Frederic Steben, Brockville, Ont., 2nd May. 1887; 5 years.

1887; 5 years.

Claim.—1st. A hot water radiator having its base divided by a horizontal partition D into upper and lower sections B, C, pipes G connecting with the upper section and with a hollow head H at top, and tubes G terminating with the pipes G and connecting with the lower section C, whereby the circulation of each pipe G is returned by tube J to the lower section C and thence to the boiler, as set forth. 2nd. The combination, with the upper section B, tubes G and hollow head H, of the lower section C having tubes J standing with the tubes G to cause a return circulation, as set forth.

## No. 26,571. Artificial Cement.

(Ciment artificiel.)

n Thorraud, Victor Nicolet and Antoine Bonnet, Grenoble, France, 2nd May, 1887; 5 years

France, 2nd May, 1887; 5 years.

Claim.—1st. The novel industrial product above described, and which is essentially formed of an intimate mixture in contact with water, of dried and pulverized chloride of magnesium with or without the addition of inert matters or calcareous powder with magnesia also pulverized, and mixed with calcareous powder or inert matters, this product intended to replace cements being capable of receiving the most varied colorations by the addition of coloured earths, or remaining white like purest plaster. 2nd. The above described process consisting in drying by moist or dry method, the chloride of magnesium, in pulverizing it with the addition of inert matters, and in preparing a magnesium cement composed as above described, these two powders preserved separately being intended to be mixed at the moment of using to constitute a product replacing cements in the manner and with the object specified.

# No. 26,572. Process of Treating Natural Gas for Illuminating Purposes. (Procedé de traitement du gas naturel pour

l'éclairage.)

John McKay, Titusville, and John M. Critchlow, Beaver Falls-Penn., U.S., 2nd May, 1887; 5 years. Claim!.-lst. The method hereinbefore described of treating natural gas, the same consisting in heating natural gas in a chamber