

A. D. 1849.—(CANADA.)—No. 263.

A new and improved method of Raising and Lowering Weights.

LETTERS PATENT to Charles Maitland Tate, of the City of Montreal, Civil Engineer, for the Invention of "A NEW AND IMPROVED METHOD OF RAISING AND LOWERING WEIGHTS."

Montreal, dated 3rd September, 1849.

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BRIEF DESCRIPTION.

If a body be suspended at the one end of a lever or arm, which moves upon its axis at the other end, and the motion or momentum which this body requires in descending the arc formed by its descent with the arm, from the vertical to the horizontal position, be transmitted by means of pullies, drums, wheels or levers to a body of similar weight, that body will be raised to such height as will be proportionate to the space passed through, by the descending weight less the friction of the medium used in transmitting the motion from one body to the other, and the momentum necessary to be acquired by the one to overcome the inertion of the other. The method of applying or using this principle is in practice as follows: a load of barrels having been raised by manual or other labour and placed in a swing, the machine is prepared to receive a corresponding load on a raising platform or frame; the carter having delivered his load thereon, signifies to the operator, by means of a bell, or any other convenient manner, that he has done so; the operator then withdraws a small catch, which holds the swing in its place and permits it to hang free, he then relieves the weight of