A DESCRIPTION OF A NEW METHOD OF PROPELLING LOCOMOTIVE MACHINES, AND OF COMMUNICATING POWER AND MOTION TO ALL OTHER KINDS OF MAHINERY

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A Description of a New Method of Propelling Locomotive Machines, and of Communicating Power and motion to all other kinds of Mahinery by William Mann

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WILLIAM MANN

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A DESCRIPTION

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AND OF

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70

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BY THE PATENTEE,

WILLIAM MANN.

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INTRODUCTION.

Before entering on this subject it may be premised, that the matters herein contained are intended to be made intelligible to the unscientific, as well as the scientific, reader, and therefore the necessary illustrations will be taken from the most familiar objects, and the calculations stated in a way, that every person, conversant with the elements of common arithmetic, will readily understand.

By the method of communicating power and motion, as hereafter described, it will be found:

That if atmospheric air were compressed to the same density as portable gas, a quantity might be carried by a locomotive machine sufficient to propel it twenty miles, and the cost not exceed one penny per mile.

That a locomotive machine, when drawing twenty tons on a rail-way, could carry sufficient to propel it upwards of a hundred miles. That the cost of power to convey goods on the rail road from Liverpool to Manchester, being 31 miles, would not exceed one halfpenny per ton.

That cheap mechanical power could be obtained from the waste coal produced at the coal mines, and supplied to the artizans in the manufacturing towns, in the same way that the inhabitants of Surrey are now supplied with light, from gas manufactured in Kent.*

And that artillery, and all such machines, as are now called fire-arms, might be supplied with power which would give a projectile force equal to gunpowder, at less than the one hundredth part of the present cost of that article.

General observations on mechanical power, and on concentrating and packing it up for various purposes.

I. The cheap mechanical power derived from wind, water, and steam, has very generally superseded animal labour, in those cases where it is practicable to convey the work required to be performed to the power that is to perform it. But as the machines used to generate and produce such power are, of necessity, stationary,—the grist must be carried

^{*} The gas is manufactured near Greenwich.

to the mill, the mill cannot be carried to the grist; such being the case, whenever it becomes necessary for the operative power to travel along with any kind of machines in performing the work, as in all cases of land conveyance and field labour in agriculture, then those mechanical generators of cheap power have hitherto been totally useless, and recourse, of necessity, had to the expensive labour of animals.

The object contemplated in the present patent, is to concentrate, pack up and make portable such mechanical power, so that it may afterwards be used at any time and place, however distant from the mills, engines and machinery by which it is generated.

The idea of packing up and making portable any thing so evanescent as power may appear somewhat fanciful, until we call to mind that it has been familiar to us from our infancy.

- II. The watch-maker furnishes a machine so ingeniously constructed, that its owner can, in a few seconds, pack into a small piece of elastic metal, called the spring, as much power as will propel and keep the machinery in motion upwards of thirty hours.
- III. The air-gun shews another, (and for many purposes a better method of packing up power) an elastic fluid is then used instead of an elastic metal,