

ipated; we have been told (publicly taught,) that at a certain vast velocity, a car upon a rail-road would be borne along by the impulse which had been previously given to it, with hardly any additional consumption of power! We have been also told that a high velocity once attained, it would require no more power to maintain this high velocity than it would a lower velocity!

MINUS WARD.

FRANKLIN INSTITUTE.

Monthly Meeting.

The stated monthly meeting of the Institute was held at their Hall on Thursday evening, November 26, 1829.

MR. JOSEPH M. TRUMAN was appointed chairman, and

WILLIAM HAMILTON recording secretary, pro tem.

The minutes of the last meeting were read and approved.

The following donations were presented, viz.

The Philadelphia Monthly Magazine, vols. 1 and 2.

Essays on Public Charities, by M. Carey, Esq.

Extracts from the Medical Ethics of Dr. Percival.

Observations and Experiments of the Efficacy and Modus Operandi of Cupping Glasses in preventing and correcting the effects of poisoned wounds, by C. W. Pennock, M. D.

A Memoir concerning the Fascinating Faculty which has been ascribed to the Rattlesnake and other American Serpents, by B. S. Barton, M. D.

Rapport sur L'utilité des Paragrésles.

Constitution and Laws of the Montreal Mechanics Institute. All presented by Isaac Hays, M. D.

North American Review, vols. 8, 9, and 10, and first part of vol. 11, new series, presented by George Fox, Esq.

First Lessons in Practical Geometry, by W. R. Johnson, presented by the author.

The corresponding secretary laid on the table the following works received in exchange for the Journal of the Institute.

The North American Review, for October, 1829.

The London Journal of Arts and Sciences, for October, 1829.

Gill's Technological and Microscopic Repository, for October, 1829.

Journal des Connaissances Usuelles et Pratiques, for August, 1829.

Journal Universel des Sciences Medicales, for July, 1829.

Bibliothèque Physico-economique, for August, 1829.

Recueil Industriel, for June and July, 1829.

Bulletin de la Société d'Encouragement pour l'Industrie Nationale, for July, 1829.

The discussion for the evening being called for, a paper was presented by Mr. Charles Potts, in reply to the query, "What is the proper method of computing the power of high pressure steam en-

gines?" which was received, when, on motion, the reading of it was deferred until the next meeting.

Extract from minutes.

JOSEPH M. TRUMAN, *Chairman.*

WILLIAM HAMILTON, *Recording Secretary, pro tem.*

An examination of the question, 'Does a Body, Descending on an Inclined Plane, with an Accelerated Motion, press the Plane with the same force through every portion of its length?' Read at the meeting held October 22, 1829, by DAVID H. MASON, Machinist.

TO THE FRANKLIN INSTITUTE.

As there exists a diversity of opinion respecting the solution of the question, "does a body descending on an inclined plane with an accelerated motion, press the plane with the same force through every portion of its length," the following remarks may not be out of place.

It is believed that the following propositions need only be stated, and accompanied with diagrams, to be well understood by those who are acquainted with the laws of motion, and resolution of forces.

Proposition 1.—If a body, A, be acted upon by two forces, represented by and in the direction of the lines AB and AC, and those forces continue uniform in their motions, it will take the direction of the diagonal of those forces.

Proposition 2.—The body, A, acted upon by two forces, represented by and in the direction of the lines AB and AC, and those forces are equally accelerated, it will take the diagonal of those forces.

Proposition 3.—The body, A, acted upon by two forces, represented by and in the direction of the lines AB and AC, and those forces are equally retarded, it will take the direction of the diagonal.

Proposition 4.—A body B, acted upon by two forces, represented by the lines BD and BC, the force BD accelerated, and the force BC retarded, it will take the direction of some curve, BE, as the parabola or cycloid.

Proposition 5.—When the body is at E, if it were propelled back again by the forces ED accelerated, and EC retarded, in the inverse ratios of the former proposition, it would retrace the curve EB.

Proposition 6.—A body, C, acted upon by two forces, represented by the lines CE and CD, both accelerated, CE in the ratio of 3, 5, 7, and CD in the ratio of 4, 8, 16, it would take the direction of the curve CF.

Proposition 7.—When the body is at F, if it were propelled back again by these forces, in their inverse ratios, it would retrace the curve FC.