

The following eminent authority is often adduced in *Encyclopædias*; but his paper is little, if at all, known, entitled—"A Demonstration of the Impossibility of Perpetual Motion. By M. de la Hire. Written on the occasion of several schemes having recently appeared:"—

There is not any of those who pretend to have found out perpetual motion, who do not agree that two weights placed in a position to move, following their natural direction in equal time, or in any way reciprocal to their weight, remain in equilibrium. Yet there is no perpetual motion scheme, where one cannot draw a conclusion quite opposed to this principle; for, whatever may be pretended, perpetual motion is nothing more or less than the elevation of one weight to a certain height by the descent of another weight at the same time; and reciprocally the restitution of the first to the place where it was before its movement, by the descent of the one that had been raised, and so on *ad infinitum*; sometimes by means of weights, which, being raised, in their fall agitate other weights; sometimes by means of liquid bodies, which, being raised, can run, and move other parts far separated from the centre of motion; from which no advantage can be derived, and which is entirely contrary to the preceding principle.

Those who occupy themselves with this chimera, find nothing but embarrassment, for generally their machines have so many weights, &c., to move them, that their inventors forget always to be on their guard against the many hinderances that arise,—the height, &c., of the powers employed, their natural direction, &c., all these are sometimes so strangely jumbled together that it requires very hard work to be able rightly to distinguish them. This is one great reason that leads such persons to a false demonstration of perpetual motion; and when they propose their beautiful inventions to those who are versed in science, and who cannot immediately make them see or understand in what way their reasoning is false, they then publish to the world that the very cleverest men have been convinced of the truth of their perpetual motion.*

* Mémoires de l'Académie Royale des Sciences. Paris, 1730, 4to. Vol. 12, page 605. [See Appendix D.]

The Paris Academy of Sciences received numerous communications on Perpetual Motion, but in their "Comptes Rendus Hebdomadaires des Séances," in conformity with a regulation of long standing, they only name the authors and the matter of their papers when upon this subject, as—

Vol. 4, 1837.—A Letter from M. PASCAL, on perpetual motion.

Vol. 6, 1838.—M. JENNISSON addressed a presumed solution of the problem of perpetual motion, offered by M. FREYBERG.

Vol. 13, 1841.—M. FURIET read a paper on perpetual motion, its object being to prove, by the most popular manner, its impossibility.

Vol. 14, 1841.—A communication received from M. VERGER on perpetual motion.

Vol. 29, 1849.—M. le Ministre de l'Instruction Publique transmits a note and paper addressed to him by M. le Prefet des Hautes-Pyrénées, in which the author, M. DULOT, describes a piece of mechanism by means of which he believes he obtains perpetual motion.

Vol. 38, 1854.—M. JAUFFRET announces himself as a candidate for the prize given for the improvement of navigation; he offers a propeller which he believes realizes perpetual motion.

M. THEOD. SYLVESTRE considers he has discovered perpetual motion.

M. BADANNEL begs the grant of a commission to examine a piece of mechanism he has invented, to give continued rotation and keep itself going.

The Academy, according to a regulation of ancient standing, cannot grant a commission to examine into papers relative to perpetual motion.

M. EUG. ROMEX announces his invention for showing the movements of the earth, acting also as a clock.

Vol. 39, 1854.—M. PARCENT presents a paper and drawing of a propeller having a universal and continuous movement.

The Academy, as before, decline investigating this matter.

Vol. 40, 1855.—M. AIME LECOQ addresses a paper on perpetual motion to the Ministre du Commerce, &c., who

sends it to the Academy, and they refuse to grant a commission for the examination of communications relative to this subject, which they consider unattainable.

M. HUHNS, of Prussia, announces having invented a system of aerial navigation, composed of a series of fanners, shaped like a bird's body, and the whole attached like a railway train. They are propelled by perpetual motion machinery.

As before stated, the Academy refuse accepting this and like offers.

Another note is addressed by M. RIEFFER on perpetual motion.

Vol. 41, 1855.—M. CASTAGNE addresses a letter relative to the squaring of the circle, and also on perpetual motion.

The Academy, as before, decline his offers, and state they consider all communications on these two subjects null and void.

M. MUYTON writes a letter relative to perpetual motion.

The Academy, as before stated, decline to take the subject into consideration.

Vol. 42, 1856.—M. BLANCHET announces his intention of submitting to the judgment of the Academy a paper in which he considers he has resolved the question of perpetual motion.

The Academy, as in like cases, refuse any examination by a commission.

Vol. 43, 1856.—The Academy have received two notes on perpetual motion—one by M. PETREMENT, and the other by M. GRUSSET—which they refuse, on their former-named regulations.

Vol. 47, 1858.—A paper presented by M. le Ministre de l'Instruction Publique, enclosing two notes—one descriptive of an astronomical apparatus, and the other a piece of mechanism—showing perpetual motion. Both by M. VITELLI, a Neapolitan.

The Academy receive the first of these notes, but the second they reject.

M. MARCHAND sends a note on perpetual motion, which is refused, on the ground of their before-named decision.*

* Comptes Rendus Hebdomadaires des Séances, de l'Académie des Sciences. Paris, 4to.

In an abridgment of the Memoirs of the Royal Academy of Sciences at Paris, for 1700, an account is given of—

A false report of the Perpetual Motion being discovered, and the impossibility of it demonstrated.

There was in this year a report spread that the perpetual motion was found. It was seen in a place where the difficulty of the thing was not well known, where the invention was not examined as it would have been in an academy, where an air of science succeeds sometimes, and the air of confidence almost always. M. Sauveur explained the invention to the academy, who were very much surprised at it. A little while after the noise that this discovery made, the perpetual motion disappeared with its author. On this occasion, M. Parent proved the impossibility of it by this single reason, that all the parts of a machine have a common centre of gravity; that while they turn round an axis or fixed point, whichever it be, this common centre of gravity finds itself necessarily in one situation, where it is lower than in any other, and that presently all must stop. For, since there is a point where the force, which many bodies have to descend, is entirely re-united, as soon as this point cannot descend any more, all these bodies must remain fixed. M. Parent determined in general that there must inevitably be this point of rest for all the machines possible.*

* The Philosophical History and Memoirs of the Royal Academy of Paris; or, an Abridgment of all the Papers relating to Natural Philosophy. Translated and abridged by J. Martyn, F.R.S., and E. Chambers, F.R.S. 5 vols., 8vo. 1742. Vol. 1, p. 203.