tory of natural forces, where he has worked with such signal ability and success. Well, you will desire to know what has become of this man. His mind gave way; he became insane, and he was sent to a lunatic asylum. In a biographical dictionary of his country it is stated that he died there; but this is incorrect. He recovered; and, I believe, is at this moment a cultivator of vineyards in Heilbronn.

While preparing for publication my last course of lectures on Heat, I wished to make myself acquainted with all that Mayer had done in connection with this subject. I accordingly wrote to two gentlemen who above all others seemed likely to give me the information which I needed. Both of them are Germans, and both particularly distin-guished in connection with the Dynamical Theory of Heat. Each of them kindly furnished me with the list of Mayer's publications, and one of them was so friendly as to order them from a bookseller, and to send them to me. This friend, in reply to my first letter regarding Mayer, stated his belief that I should not find anything very important in Mayer's writings; but before forwarding the memoirs to me he read them himself. His letter accompanying the first of these papers, contains the following words .----- "I must here retract the statement in my last letter, that you would not find much matter of importance in Mayer's writings: I am astonished at the multitude of beautiful and correct thoughts which they contain;" and he goes on to point out various important subjects, in the treatment of which Mayer had anticipated other eminent writers. My second friend, in whose own publications the name of Mayer repeatedly occurs, and whose papers containing these references were translated some years ago by myself, was, on the 10th of last month, unacquainted with the thoughtful and beautiful essay of Mayer's, entitled "Be-itrage zur Dynamik des Himmels;" and in 1854, when Professor William Thomson developed in so striking a manner the meteoric theory of the sun's heat, he was not aware of the existence of that essay, though from a recent number in Macmillan's Magazine I infer that he is now aware of it. Mayer's physiological writings have been referred to by physiologists-by'Dr. Carpenter, for example-We have in terms of honourable recognition. hitherto, indeed, obtained fragmentary glimpses of the man, partly from physicists and partly from physiologists; but his total merit has never yet been recognised as it assuredly would have been had he chosen a happier mode of publication. I do not think a greater disservice could be done to a man of science, than to overstate his claims; such overstatement is sure to recoil to the disadvantage of him in whose interest it is made. But when Mayer's opportunities, achievements, and fate are taken into account, I do not think that I shall be deeply blamed for attempting to place him in that honourable position which I believe to be his due.

Here, however, are the titles of Mayer's papers, the perusal of which will correct any error of judgment into which I may have fallen regarding their author. "Bemerkungen über die Krâfte der umbelebten Natur," Liebig's Annalen, 1842, vol. 42, p. 231; "Die Organische Bewegung in ihrem Zusammenhange mit dem Stoffwechsel;" Heilbronn, 1845; "Beitrage zur Dynamik des Himmels," Heilbronn, 1848; "Bemerkungen über des Mechanische Equivalent der Warme," Heilbronn, 1851.

INDIA RUBBER MANUFACTURES AT THE INTERNATIONAL EXHIBITION.

(From the " Mechanics Magazine.")

"To commence with our own country, and the Eastern Annexe, to which india-rubber manufactures —like many others, equally worthy of better positions in the main building—have been condemned, we find upwards of twenty exhibitors of various manufactures in this material, to say nothing at present of gutta-percha, and other analogous substances.

"Prominent amongst these stand the original patentees in England, C. Macintosh and Company, of Manchester, who have three cases here, containing specimens as applied to various purposes. The manufactures of this firm are too generally known to need much comment; but we may particularize, as worthy of notice, the beautiful specimens of raw material in their large case, showing the process of manufacture, from the masticated lump to the finished sheet. They also exhibit suction hose, buffers and springs, driving bands, tubing of all colours, and a peculiar make of hose, consisting of leather and india-rubber combined, which, we should think, for some purposes, an improvement on the ordinary kind. They have, also, an application of tubing for the illumination of railway carriages by gas, which, we understand, has been tested on the Lancashire and Yorkshire Railway, and found prac-This being the case, we sincerely hope that ticable. its adoption will be universal in every class of In educarailway carriage, as well as on all lines. tional appliances, an inflated globe for the use of schools merits attention, as a very simple and cheap substitute, and decided improvement on "the use of the globes.". The one exhibited is about three yards in circumference, the price being only $\pounds 3$ 10s.

"Next in importance are Messrs. Silver and Company, and Messrs. Warne and Company, who stand forward pre-eminently as enterprising producers of the newest improvements in the manufacture and application of the material. Silver and Co., with their evonite, which is similar in appearance to the old vulcanite of 1851, stand by themselves; no one having hitherto been able to produce the material satisfactorily in this country. They exhibit, as practical applications, tubes or pipes of large dimensions, which are not effected by acids, for the use of vinegar and dye works; bottles and funnels, photographic baths and dishes, (in place of guttapercha,) coated harness irons, bracelets and chains, for ornamental use in place of jet, as well as numerous other things. In soft vulcanized indiarubber, great credit is due for a very ingenious mat for doors or halls. This is produced by making incisions with a sharp knife at regular intervals and spaces in a sheet of the unvulcanized material, so that when stretched out small diamond squares are formed, and being kept open by mechanical means during vulcanization, a mat is produced, firm to the foot, and excellently adapted for the purposes required. They also exhibit washers, valves, steam packing, hose, &c., all of which show a great advance