

I annex an example for 5th power ; the 5th power of

	1	2	3	4	5	6	7	
is	1.	32	243	1024	3125	7776	16807	
difference is	31.	211.	781.	2101.	4651.	9021.		1st movement.
" "		180.	570.	1320.	2550.	4380.		2d "
" "		390.	750.	1230.	1830.			3d "
" "			360.	480.	600.			4th "
" "			120.	120.				5th "

J. V. M.

### *Nasmyth's Improved Process of Puddling Iron.*

To the Editor of the Journal of the Franklin Institute.

The announcement made in the September number of the *Journal*, p. 209, under the above caption, that we were assignees of the patent for the United States, was an error which has arisen probably from the fact that we had, in Mr. Nasmyth's name, applied for such a patent in this country.

Mr. Nasmyth's claim has, however, been rejected by the Patent Office, on the ground that it conflicts with the patent issued to Guest and Evans by the English Patent Office, in 1840, and described in the *London Repository of Patent Inventions*, Vol. xvi, p. 341, by reference to which, it will be perceived that the principle of both possess, viz., the application of steam beneath the surface of the molten metal, is the same, although in our judgment, Mr. Nasmyth's application is far more simple and less likely to derangement than the former, and perhaps these advantages may be all that is required to bring the process into general use. Be that as it may, we take occasion to say that Mr. N's. accounts of his success in England in producing by this method a cheaper and better iron, are such as to warrant us in expressing the hope that some of the leading iron firms in this country may take it up.

MERRICK & SONS.

Philadelphia, November 15, 1855.

For the Journal of the Franklin Institute.

*Remarks on the Steamer "Lancefield."*

HONG KONG, CHINA, August 4th, 1855.

To the Editor of the Franklin Institute Journal.

A new Steamer called the "*Lancefield*," arrived on this station about a month since from England. She is owned by the House of Jardine, Matheson & Co., of Hong Kong, and runs between Bombay or Calcutta and this place in the opium trade. I visited her a number of days since, when I obtained the following information, which I transmit to you, as I suppose you take an interest in all that is transpiring in our profession, even in this remote region.

She has two engines—constructed by Napier & Sons of Glasgow—of the four piston rod variety, connected direct, i. e. without the inter-