A Letter from Mr. J: Beaumont of Stony-Easton in Sommersetshire to one of the S. of the R. S. concerning a New way of Cleaving Rocks.

A confiderable adventurer in the Lead Mines on Mendip hills, being in London a while fince, was pleaf'd to acquaint me that the Miners there, within these twelve months, had gotten a new way of Cleaving Rocks with Gunpowder, whereupon I desir'd he would please to favour me with a Present of the Instruments us'd in it, which I conceiv'd would not be unacceptable in the Repository at Gresham Colledge, where I have now caus'd them to be deliuered.

The first Instrument, which by the miners is call'd the Borier describd Fig. 7 is made of Iron, and is 2 foot 2 Inches in length, it is an Inch square at the steeled end from a to b, and somewhat lesse in the other part: the use of this Instrument is to make a hole in the Rock deep enough to receive the Powder: the second Instrument, call'd the Gun represented Fig. 8. is 6. Inches in length, 14 diameter, and has a hole drill'd through it to receive the priming Powder. The first Instrument is manag'd thus, one man holds it on the Rock and turns it round, while another beats it down with a hammer of five or six pounds weight; when the hole is made somewhat deeper then the length of the Gun, they dry it with a rag, and put into it about 2 or 3 Ounces of Powder, over which they put a thin paper, and on it place the Gun, which they bind firmly into the hole, by driving in against the flat side of the upper part of it, the third Instrument, which is a little Iron wedge 4 inches in length, by the Miners call'd a Quinnet describd Fig. 9. when this is done, they pass down a wire through the hole drill'd in the Gun, and pierce the Paper

Paper which covers the Powder and then they prime the Gun and lay a traine and goe up out of the work before the Powder comes to take fire; the Paper is put at first oe ver the Powder, lest when the Gun and Quinet are drivedown, the tooles may strike fire and kindle the Powder.

In number: 5. of the Philosoph. Transact. set forth by Mr. Oldenburg there is a way of breaking Rocks with Gunpowder Communicated by Sr. Robert Moray, as he received it from Monsr. du Son the Inventor, and there is a draught of the Instruments for that purpose, but in regard those Instruments differ in severall things from these, I thought it might not be amiss if these were like-

wife Inferted,

I know the use of these Instruments will be of great advantage to Miners, and if there are any Minerall works where they are not yet receiv'd, the Miners may doe well to try them; for (beside what will be sav'd in timber in a year that is used in burning Rocks, which is very considerable,) we know that as soon as a man has fired his Powder and broken the Rock, he may presently go to work again, whereas after a fire is laid in a Shaft, a man can scarce go to work in 24 hours after, the Rocks being too hot to suffer him.

other wheels made is inches high to be put on in lead of the leffer. The middle of the a axes were dinches as finader. All the wheels turned very oasily upon the axes. A piece of Lead job avoirdupois was laid upon the modell, fo forward that the leffer wheels seemed to bear above it parts of the weight. Then the models was solve it parts of the weight. Then the models was was fold that he fring laid does a Pulley, the top whereof was a final lingher then the top of the hinder axis;

duary height of the wheels of a Hagen: The weight of

a Coom pa 455 Later pr. 16 Schol, e Meg c 7, pr. 3 Schol, S 15.

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