explorations, &c., I fear this flattering description must have arisen from the writer not having a practical acquaintance with local societies.

In a society in the West of England, consisting of nearly 400 members, I know of but one who does anything for the local museum, or for the advancement of geological science. The society's principal results are archæological; geology and natural history are in the background. Another west country society is divided into innumerable sections, which have their excursions, and an occasional general excursion; but their results in the cause of science are as valuable as those of an ordinary picnic party. This description will, I fear, answer also very well for one with which I am acquainted in Sussex. In all these instances the local museums are such as might be expected from such apathy.

In too many instances the science of the scientific societies begins and ends with the name. There may, perhaps, be one or two members who are active, but feel little encouragement to do much for the public good, or in the way of contributing to the local museum. Of course these societies are composed in a great measure of members who take no interest whatever in science, and who join them without any definite object; but it is a pity that the public should be subjected to such a delusion. There are, of course, some few societies which are fortunately more active, and produce valuable results, but as yet I have seen no good local museum in connection with them, and that is a bad test of the practical nature of a society. I know of but one museum which at all answers the description of a local museum, and that is at Bath, which is due to the genius and energy of Mr. Charles Moore. But as long as members of local societies collect for themselves and not for the public good, their museums must remain at a stand still. Few have any idea of the valuable collections which are made, or the labour spent on their formation, by individuals who are indifferent as to what eventually becomes of them.

It is want of public spirit and self-complacency, which are the great hindrances to all progress. It is to be regretted that the Geological Society of London does not set more of an example to the provincial societies; it ought to exert an influence throughout the country, and take some interest in their progress. The state of the collections at Somerset House is certainly not an honour to any society.

The co-operation of local societies, and having their results published for the benefit of all, *might* have a great effect on the advancement of science. A general contribution for the purpose of a weekly issue of British Journals of Science (in various departments), which should be common to all, would be a step of great importance. I know of no remedy for this state of ignorance and apathy as to the valuable results of which they might be capable, but such a co-operation, combined with a certain amount of union with the scientific societies of London, which might have the effect of keeping the provincial societies up to the mark. This must also be accompanied by a unity of object, as well as of system in the management and arrangement of their museums.

F. G. S.

Newspaper Science

IN reply to the letter of "Medicus" in last week's NATURE, allow me again to state that the curious details as to Krupp's gun manufactory, with which the public were enlightened in the *Globe* of September 11, appeared in that paper as a leading article, and not as a mere "note-paragraph," as "Medicus," who "never writes articles," evidently desires to be understood. Had they been in the form of the ordinary newspaper paragraph, containing accounts of some wonderful discovery in zoology, chemistry, or mineralogy, such as, for example, some late ones on "the appearance of a gigantic lizard in North Wales," "the extraction of the fixed air from the pea sausage for use in the army," or the "abundance of platinum at Bathgate, in Scotland,' which I find copied into the *Times* of to-day, I should not have troubled the readers of NATURE with my letter of September 13.

When, however, we find such "blunders," to use "Medicus's" own word, whilst he admits at the same time that they "had passed the editorial eye," palmed on the public on the authority which should be due to the leading article of a highly respectable and largely circulated newspaper, I think it is high time to protest against technical science being popularised in this style; and *à propos* to style, the peculiarly pleasant and what would vulgarly but expressively be called the "chaffing" style of "Medicus's" communication to NATURE conveys to the reader the impression that its author is more at home in writing for penny newspapers than for scientific periodicals.

In conclusion, the perusal of the letter of "Medicus" will certainly remind metallurgists of the man who, when he felt his feet slipping under him in the water, brought himself altogether out of his depth by imprudent and convulsive struggles to extricate himself. The use of the French word "*creuset*" instead of the plain English "crucible," suggests a French source of information, and not the original German "Schmelztiegel" of Krupp's manufactory at Essen; and when "Medicus" corrects his text, and tells us it should read "the iron is alloyed in crucibles formed with certain clays and a preparation of plumbago" (!) metallurgists will still believe that it was steel not iron which is introduced into these crucibles, and doubt its being alloyed at all, but only melted in them; and will, moreover, be of opinion that if "Medicus" was at home in the subject on which he has been writing, he would have at once explained that when he unfortunately described the steam-hammer as "of the force of 25,000 kilometres" (in plain English, 15,532 miles), that the last word was simply a misprint for kilogrammes (so that the hammer was nearly 24¾ English tons), and not grasped at a straw in the shape of the far-fetched and in this instance equally misapplied term kilo*gram*metre!

DAVID FORBES

11, York Place, Portman Square, London, Oct. 9

P.S.—If "Medicus" desires correct information as to the steam-hammers, &c., at Krupp's manufactory at Essen, he will find it in the recently-published official report of the Chamber of Commerce there, a short abstract of which is embodied in my fourth quarterly report (for 1871) to the Iron and Steel Institute, on the "Iron and Steel Industries in Foreign Countries."

The Cyclone in the West Indies

I THINK others besides me would be glad of an article in your paper on the Cyclone of the 21st of August in the West Indies. The narrow limits of the hurricane are noteworthy. I hear from the West Indies that Nevis, between Antigua and St. Kitts, has escaped, being a little to leeward. Has Saba escaped likewise? To windward Barbuda and Anguilla seem to have been also beyond the storm, as was also Virgin Gorda; the centre of the cyclone passing over St. Thomas (and, I presume, Tortola also) on its way to Porto Rico.

I have exact details only from St. Thomas, which I could, I think, put at the service of any one writing on the matter; but the principal fact in them is, that the main rush of wind, which did the damage, fell on the harbour from N.E. to N., destroying horribly all houses in the N.E. gully which slopes down to the harbour; but so turned right and left by the high hills above the town, that it was impossible for one in the harbour to discern the actual direction of the main current. This blast fell just before the central calm.

I trust that we shall have from some of your contributors somewhat which will throw more light on all hurricanes, from the lessons of this last.

Excuse the interest which one who knows those seas and islands—when he passed through them, blazing in beauty and repose—must needs take in the details of such a tragedy.

Eversley, Winchfield C. KINGSLEY

On the Solution of a certain Geometrical Problem

I REGRET that the work I referred to should have been so readily identifiable; still more, that Mr. Todhunter should think I intended to imply "signal geometrical weakness" on his part. I should imagine, on the contrary, that few living men surpass Mr. Todhunter in geometrical strength; though I may have inferred from some passages in his works that that special part of his mathematical strength had not been so fully developed by practice as his power in mathematical analysis.

It must be quite obvious to anyone who reads the whole of the appendix to Mr. Todhunter's Euclid, that sooner or later the series of problems on circle-contact (*i.e.* to Prop. 16) would require the introduction of the sixth-book method. This method is also very conveniently introduced in Prop. 7. But the omission of all mention of the third-book method* would certainly lead the student to infer that the sixth book must be employed. If it led me to infer that Mr. Todhunter happened not to know

* Especially as but three lines would be needed to indicate the method. Thus: From the given point A draw a perpendicular AD to the bisector of the angle between the given lines; produce AD to E so that DE is equal to AD; a circle described (by the preceding proposition) through D and E to touch either of the given lines will obviously touch the other also.