which easily crumbles into dust. The cock bird perched himself on the tree over my head, and began pecking with wonderful rapidity at this lichen and moss, so that, the moment I looked up, a shower of fine dust fell on my face. As I followed the young bird, the old one followed me, got on a branch as close to my head as he could, and sent a shower of dust down upon me. I can scarcely doubt that the dust, like the previous swoops, was intended rather to *blind me* than to distract my attention. Have instances of like sagacity—*i.e.* the apparent knowledge of the organ of vision and the means of injuring it—been noticed in *jays* before?

KARL PEARSON

Saig, Schwarzwald, July 14

Munro and Jamieson's Electrical Pocket-Book

As Mr. A. Gray's criticism of our "Pocket-Book" is chiefly confined to literal errors practically unavoidable in a work of the kind, we take the opportunity of stating that we have lately been correcting these for the second edition, which, we are happy to say, has already been called for.

J. MUNRO AND A. JAMIESON

I OBSERVE that in my article in the last number of NATURE the third sentence of the third paragraph of p. 263, beginning "In the particular case, &c.," should have the words "corrected for the heat of combination of copper oxide and sulphuric acid" inserted after the word "this."

A. GRAY

Glasgow, July 21

THE GREELY EXPEDITION

SUCCESS has at last attended the efforts to rescue the expedition to Lady Franklin Bay under Lieut. Greely; but, alas, out of the twenty-five men who started three years ago nineteen have perished. The party had left their station, Fort Conger, in August last, but did not succeed in getting further south than Cape Sabine, in Ellesmere Land, at the entrance to Smith Sound, about 150 miles from Lady Franklin Bay, and some 300 or 400 miles from Upernivik, the nearest Danish station. It is easy now to say that it would have been much better for the expedition to have stayed on in their comparatively comfortable quarters at Discovery Bay; the chances are that they would all have survived, and probably all have been rescued this summer by the relief party in the *Bear* and the *Thetis*.

We may remind our readers that the Greely expedition was sent out by the Government of the United States as one of the series of International Arctic expeditions, the main purpose of which was to take regular observations, according to a preconcerted plan, on the meteorological and other physical conditions of the Polar area. As the Greely expedition had to go much further north than any of the others, it started a year earlier in order to be sure to reach its post in time and be able to begin observations not later than August 1882. It was thoroughly equipped, both with scientific apparatus and with the material for a comfortable life under unusually trying conditions. The provisions supplied could have easily been made to last until the present summer, and we know from letters from Lieut. Greely, written shortly after his arrival, that the region around Lady Franklin Bay, 81° 44' N. lat., abounded in musk oxen. In the summer of 1882 strenuous efforts were made to reach the station, but with no success. Last year two vessels were sent out, but the state of the ice was such that one was completely crushed and the other was glad to escape southwards almost as soon as it had entered the threshold of the intricate channel that led to Fort Conger.

The expedition which has been so fortunate as to rescue the six survivors consisted of the United States ships *Bear* and *Thetis* and Her Majesty's ship *Alert*, which was presented to the United States Government for the purpose. The condition in which the few survivors were found is almost too harrowing to record; how very nearly too late the rescue party were is impressively shown by the fact

that Lieut. Greely, surrounded by his prostrate companions, was reading the service for the dying. "The red syenite rock forming Cape Sabine," Sir George Nares tells us, "and the islands in the neighbourhood of Payer Harbour is sterile and barren to the last degree. During the three days we were detained there, although parties from the ships explored the whole of the immediate neighbourhood, very little animal life was seen." The end of the cape or peninsula is cut into by a bay in which are several islands—Brevoort, Payer, Stalknecht, &c. Here Sir George Nares in 1875 left 250 rations, which do not seem to have been discovered by the Greely party; and of the 50,000 lbs. of food buried for them by the rescuing parties Lieut. Greely succeeded in finding only 250 lbs.

For full details as to the work accomplished by the unfortunate expedition during its almost three years' stay in so high a latitude we must await the publication of the records. Happily all the records have been saved, and thus the gain to science is likely to be of unusual value. What are the hardships to be met with, and the aspects of nature to be witnessed in this remote latitude, we know something of already from the records of our own expedition ten years ago under Sir George Nares. But the present expedition, profiting by the experience of its predecessors, and working on a carefully prearranged plan, is likely enough to tell us much that we never dreamt of. While the main work of the party was to make regular observations in physical science, it is evident that they have taken advantage of their exceptional position to push back the limits of our ignorance of Arctic geography. The lowest temperature experienced is stated to have been 61° below zero F. We all remember the exciting narrative of the painful scramble of Commander Markham and his brave men over the "palæocrystic ice" in order to make the attempt at least to reach the Pole. After about sixty miles they had to return baffled, glad to escape with their lives. Markham and Parr and their men had, however, the satisfaction of having attained the highest latitude ever reached—83° 20' 26". Lieut. Lockwood, however, succeeded in getting some four or five miles (83° 24') beyond Markham's farthest, and 19° to the east of the English route.

Lieut. Lockwood, unhappily among the dead, seems to have been one of the most active and enterprising members of the expedition. He followed Lady Franklin Bay in its continuation, Archer Fjord, ninety miles beyond Beatrix Bay, Nares's furthest, quite to the other side of Grinnell Land, which he found to be an island, separated by Archer Fjord from the land to the south, now named Arthur Land. This was confirmed by the view obtained from Mount Arthur, 5000 feet high, west of the Conger Mountains, which may possibly be the range named after the United States by Sir George Nares. This Grinnell Land seems in many ways to be an interesting region; there are evidently several peaks or mountain ranges reaching a height of 5000 feet. A considerable area both on the north and south shores is covered by an ice-cap 150 feet thick, while, so far as we can judge from the report, there is a belt of comparatively open country in the interior some sixty miles wide. Even so late as March last, when the members of the expedition were dying one by one on Cape Sabine, exploration was not neglected. From Mount Carey to the north-west of the cape Sergeant Long obtained an extensive observation in the direction of Hayes Sound, which showed him that the Sound extends twenty miles further to the west than is shown on Sir George Nares's chart.

On his journey northwards Lieut. Lockwood succeeded in reaching 7° further east than Lieut. Beaumont's furthest in 1875. From a height of 2000 feet he saw no land to the north or north-west of Greenland, but away to the north-east, in lat. 83° 35', and long. 38° 82',