

It was decided to revise and enlarge the exchange list of the academy *Transactions*.

G. P. GRIMSLEY,
Secretary.

DISCUSSION AND CORRESPONDENCE.

THE ACTIVITY OF MONT PELÉE.

THE generally friendly tone of your reviewer's (T. A. J., Jr.) notice of my 'Mont Pelée and the Tragedy of Martinique' makes it almost ungenerous on my part to take exception to any of the statements that this notice contains. There is one point, however, dealing directly with the physics of Mont Pelée, that seems to me to deserve attention from its bearing upon volcanic phenomena generally. Your reviewer takes strong exception to the use that I have made of Russell's formula in computing the cubical content of the ash-cloud, and remarks that the defect in my reasoning 'lies in the assumption that a primary eruption is continuous for days or even hours.' The somewhat surprising statement follows that: "Professor Heilprin has failed to discriminate primary and secondary eruptions when he talks of Mt. Pelée 'being in a condition of forceful activity for upwards of 200 days.'" This does scant justice to my powers of observation, for it takes no scientist to separate or discriminate between the two classes of phenomena, any more than it requires a scientific eye to note the difference between the explosion of a dripping drop from a 'boiling kettle' and the 'blow' that issues from the snout. I fear that Dr. Jaggar has not seen Pelée in 'Pelée's glory,' otherwise he could hardly have hazarded the statement to which attention is called, and still less the subsequent one that 'the reviewer questions whether the volcano has been forcefully active from great depths for that many [200] minutes.' Had Mr. Jaggar been on the island of Martinique at any time during the days August 25 to September 3, inclusive, his conception of a 'primary eruption' would be very different from what it manifestly now is—he would have seen a raging central eruption continuous for that time, and not a

landscape of 'tremendous puffs that rise many thousand feet.'

When I prepared the chapter of my book which contains the calculations to which my reviewer takes exception, I was unaware of the conditions of the volcano which followed after my leaving the island. These are in many ways most interesting, and tend to confirm my conclusions as to the extraordinary quantity of the sedimental discharge from Pelée. The continuous activity of the volcano has been such that in the interval between the first week in September and the middle of December the mountain had increased its height by nearly or quite 900 feet (!), the needled summit of the cone (which had united with the old crateral wall) being on December 16, as measured by Lacroix, 4,995 feet above sea-level. Much of this has since been destroyed, but Pelée is still at its work, adding to the 300 feet of ash that it has already laid down in parts of the valley of the Rivière Blanche. I do not think that the volcano can be seriously accused of working in working times of 'five or ten minutes.' In the days of the August-September activity, I feel satisfied—although necessarily lacking the means of *proving* the accuracy of my belief—that the continuous ash-discharge could not have been less than twenty per cent. of the measure of the steam-cloud; it may have been very much more.

ANGELO HEILPRIN.

PHILADELPHIA, PA.,
March 17, 1903.

THE PUBLICATION OF REJECTED NAMES.

I AM glad to see Mr. Bather's letter, although I can not altogether agree with what he says. My view is that if a description appears, accompanied by two or more names in the same publication, all being simultaneous in point of time, nothing but 'priority of place' can furnish a certain and invariable rule for selecting the one to be retained. I do not want to disturb existing rules, but I do want to see the same rules in use for all groups of animals and plants. My objection to the action of Messrs. Banks and Knowlton was based on the fact that they seemed to me