his original intention of merely writing lecture-notes for his class, there would have been some force in his excuse; but when he sends forth his work as "a text-book, with the hope that it may find a wider field," he cuts the ground from under his feet. He must recollect that the majority of his readers will never have the opportunity of seeing his lecture diagrams and lantern-slides. If illustrations are out of place in a text-book, why did the author take the trouble to insert twenty-nine? Surely he is not ashamed of his beautiful and instructive frontispiece.

(4) Mining chapter.—After Prof. Tarr's candid confession, I will not say another word likely to cause him pain or annoyance; but will merely express the hope that Professors of Economic Geology, while examining mineral deposits, will take the trouble to notice how they are worked, and so render themselves independent of any second-hand aid when writing upon the art of mining.

The Reviewer.

## Halo of 90° with Parhelia.

ON July 11 the halo of 90°, intersecting a primary halo of the usual size, but intensely brilliant in colouring, was visible at West Newton, Cumberland, for about four hours—9 a.m. to 1 p.m. The sun shone brilliantly all the time. Light strips and wreaths of cirrus and minute mottled cirro-cumulus marked the upper sky. There were several mock suns, not all equally distinct. The halo of 90°, a very unusual phenomenon, was of a pale grey-blue tint, showing no prismatic colours, except in a very slight degree at the point furthest removed from the sun.

This system of halos formed a splendid sight for about four hours, indicating a vast sheet of ice-crystals. I have observed that parhelia sometimes precede heat, as well as stormy weather.

The intensely vivid colouring of the part of the two (almost concentric) halos, where they intersected above the sun, was most striking.

SAMUEL BARBER.

West Newton, Cumberland, July 11.

P.S .- Four dry days followed, the fifth wet.

## Rate of the Flight of Birds,

I SHALL be glad if any of your readers can inform me whether the rate of the flight of any birds other than Homing Pigeons has been accurately measured, and what attempts, if any, have been made to employ birds belonging to other families in place of Homing Pigeons.

F. W. HEADLEY.
Haileybury, July 15.

THE UNIVERSITY OF LONDON AND THE REPORT OF THE GRESHAM COMMISSIONERS.

THE University of London is beyond question the Institution most nearly concerned with the recommendations of the Commissioners appointed to consider the draft charter for the proposed Gresham University in London. These proposals, as was pointed out in NATURE in March last (vol. xlix. p. 405), involve the reconstruction of the present University and the forma-tion of a Senate and Convocation having powers differing considerably from those at present possessed by Importance would, under any circumstances, attach to the attitude assumed by either body towards the Report, and in the present case it is in no way lessened by the fact that in the charter of 1863 it is ordained that Convocation—that is, those graduates of the University who have attained a certain seniority and paid certain fees-shall have "the power of accepting any new or supplementary charter for the University, or consenting to the surrender of this our charter, or of any new or supplemental charter," the consent of the Senate being also requisite before either acceptance or surrender becomes operative. This power of veto was exercised by Convocation in 1891, when a draft charter proposed by the Senate was rejected by a large majority, and the

way made clear for University and King's Colleges to proceed with their petition for a separate University.

The preparation of a scheme for engrafting teaching on the present examining functions of the University of London did not originate with the Senate. To Convocation belongs the distinction of being the first to advocate this enlargement of the scope of the University, and its proposals were embodied in a scheme as long ago as 1886, while in a later scheme submitted to the Commissioners it indicated in still further detail the lines on which in its opinion a solution of the question might be found. The inability of each body to accept the schemes of the other, the chronic division of opinion between the Senate and Convocation on the Teaching University question, did not augur well for a joint assent to any scheme resulting from the labours of the Commissioners appointed in 1892.

This contingency evidently presented itself to a large majority of the Commissioners, since, with a wisdom which seems likely to be justified by events, they have gone beyond the terms of reference, which contemplated "the establishment under charter of an efficient Teaching University for London," and say that "in view of the failure of previous attempts to settle this question, and of the difficulty and delay which must inevitably attend an alteration of the constitution of the University through the action of the University itself, we are of opinion that, in accordance with the precedents followed in other cases of University reform, the changes which we recommend should be effected not by charter, but by legislative authority, and by the appointment of a Commission with statutory powers to settle, in the first instance, arrangements and regulations in general conformity with the recommendations which we are about

to submit to your Majesty."

The latest project for the inevitable extension of University education in London was speedily recognised by many as a well-considered and feasible plan for meeting the requirements of the case. Highly desirable as it was that it should be accepted by, and not forced upon, Convocation, yet at first the outlook was anything but bright. The Annual Committee of Convocation—the body of graduates elected every year "to advise Convocation upon any matter affecting the interests of the University"—undertook the preparation of a report on the scheme of the Commissioners for presentation to Convocation. While this was under discussion an interview took place between it and the Committee of the Senate charged with the consideration of the Commissioners' Report, and it may be inferred that exception was taken to the revocation of the veto and to the mode of procedure proposed by the Commissioners, since the Chancellor (Lord Herschell), in the course of his reply, is reported to have said: "If the proposals of the Commissioners were generally considered to be for the public good, and a reasonable solution of the problem that had been referred to them, it would scarcely rest with this University, either through the Senate or through Convocation, to veto the plan; nor should the remodelling of the constitution of a public body, with a view to its further efficiency, be regarded as a penal abrogation of its charter."

Disregarding this statesmanlike view of the situation, the Annual Committee the same evening adopted a Report wholly adverse to the proposals of the Commissioners, and drew up five resolutions which they recommended Convocation to adopt. Space will only permit reference to the first: "That Convocation protests against the withdrawal without its consent of the charter of the University of London as proposed by the Gresham Commission . . ." and the fourth: "That Convocation therefore, although it would regret the establishment of a second University in London, is of opinion that it would be less disastrous to establish such a University with a