

very remarkable, because, on account of an accident in the treatment, a failure or a poor positive had been expected. Several repetitions of this treatment had failed to yield this result again.

It is frequently observed that with a strong pyrocatechin developer the picture will start as a negative in the light, and will reach a fair degree of excellence, and then reverse. This is in the nature of an oscillation such as is known in electric discharges. The phenomenon is not observed in a weaker or in a more slowly acting bath. The anomalous case before referred to could hardly be accounted for in this way, because the picture developed very slowly in a normal hydrochinon bath, and grew steadily better until it was sharply defined on the back of the film. This case is still being examined.

A short biographic sketch of the late Charles Pierre Chouteau, a charter member of the Academy, who in its early years, as the western representative of the American Fur Company, contributed many important collections to its Museum, was presented by a committee appointed for that purpose.

Two persons were elected to active membership.

WILLIAM TRELEASE,
Recording Secretary.

DISCUSSION AND CORRESPONDENCE.

A FIELD FOR MOSQUITO THEORISTS. CLIMATIC CONDITIONS ON THE UPPER CONGO.

TO THE EDITOR OF SCIENCE :—The following extracts from letters of Father Grison, a Missionary at Stanley Falls, and Mg'r Roelens, Vicaire Apostolique of the Upper Congo, addressed to the Société Antiesclavagiste of Belgium, may be of interest.

G. R. S.

WASHINGTON, D. C.,
February 12th.

At Stanley Falls the climate is very agreeable, but is formidable, as the victims of fever are too numerous. Europeans have very inaccurate ideas of tropical temperatures. I have passed eight years at the equator on the Pacific Coast, and have never seen the mercury above 29° C.

Here the maximum is 32° C. and the nights are deliciously cool. This is our climate all the year.

There is, however, a reverse to this picture. We

have frequent tempests of indescribable violence ; I have counted in one minute during a diluvial rain and continuous thunder, sixty-six flashes of lightning ; and have seen in two hours within a radius of a few hundred meters, ten *coup de foudres*.

Mg'r Roelens at M. Pala, writes :

The work of the Mission allows me little leisure for anything else than an occasional attack of fever.

The fever, however, does not ask if you have the leisure, but imposes it at will, and unhappily, a little too frequently.

Dame fever reigns as mistress of the country.

In the rainy season, from November to May, her tyranny is most severely felt ; no one escapes attack ; the newly-arrived are most susceptible, but the old residents are not completely immune.

Those who have been resident more than a year are the chosen victims of the terrible hæmaturic fever (Malarial hæmaturic, or 'Swamp fever.') In five years' residence I have had the fever fourteen times ! For the last two years, fortunately, it has left me in peace.

Brother Stanislas, who has resided here since 1893, is now sick with it for the twenty-fifth time.

It is an old saying here that the third attack is always mortal.

We, however, have passed the period when our lives are despaired of ; this result is due to the treatment we have followed here.

Since 1892 the missionaries of the Upper Congo have applied this treatment to seventy-five cases of this fever, of which five only have been fatal.

Beside this there are no other grave climatic dangers for Europeans. The dysentery, which elsewhere is a serious menace, does not occur here.

I suspect that the English at the south of us find this malady more frequently in their boxes of conserves, and in *la dive bouteille*.

At this moment an epidemic of smallpox is invading the country. It is said here that this recurs every seven years, and attacks all who escaped the previous invasion.

We cannot depend upon the vaccine of Europe, because of the long voyage and the great heat.

I have given it many trials without result.

SHORTER ARTICLES.

ARE THE AUSTRALIAN MARSUPIALIA OF OPOS-SUM DERIVATION.

AT the last meeting of the American Association for the Advancement of Science, in June, 1900, the writer presented some reasons in