

gent collector will scarcely need directions on those points.

Of course all this is intended to illustrate New York archeology, but this has relations to other parts of the land, and some cabinets contain fine and valuable specimens from other states. These are not to be overlooked, and I have several such cabinets in my mind. They are interesting in themselves and valuable for comparison.

This communication will not directly reach all those whose aid is desired, but if others will call attention to it good results may be expected. I am often surprised at finding some article of special interest in some hitherto unknown collection. Hence the importance of reaching every student of this great subject. May I hope for a speedy and general response from those interested.

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#### PRICKLES OF THE PRICKLY ASH.

It might be well to call attention to an error occurring in Bailey's 'Elementary Text-book of Botany,' 1901, p. 105, figure 157, where it states that the 'prickles' of the prickly ash are modified stipules. Seeing that the same error occurs in Bailey's 'Encyclopedia of Horticulture,' it may be supposed that it is not a mere typographical error.

In the case of the prickly ash, *Xanthoxylum americanum*, Mill., the prickles are true prickles, having no connection with the internal structures, as they would have if they were stipular in nature. These prickles occur frequently at the bases of the leaves, giving rise very probably to the false notion as to their morphology. However, they do not occur at the bases of all the leaves, there being not infrequently no signs of them. Furthermore, they are occasionally found elsewhere, on the branch, and also on the rachis of the compound leaf.

In Chapman's 'Flora of Southern United States,' 1897, it states, under family characters, 'exstipulate leaves,' and, under *Xanthoxylum*, 'trees or shrubs, commonly armed with stipular prickles.'

Gray states, as a character of the order, 'stipules none,' and, under *Xanthoxylum*, 'stems and often leaf stalks prickly.' Gray is correct, but Chapman, with many others, is in error. The structures referred to are not stipular, but are true prickles. Stipules are not found in any of the genera of the family to which *Xanthoxylum* belongs.

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#### THE NEXT ERUPTION OF PELÉE.

In the Boston *Transcript* of September 3, 1902, the writer called attention to the peculiar sequence of eruptions in Martinique, as follows:

Date.	Preceding Interval.	Violence.
May 5.		Destruction Guerin Factory.
May 8.	3 days.	Destruction St. Pierre.
May 20.	12 days.	Further destruction St. Pierre and destructive wave at Carbet.
June 6.	17 days.	More incandescent material.
July 9.	33 days.	Larger stones at Morne Rouge; more incandescent material; detonations heard at Barbados.
Aug. 30.	52 days.	Destruction of Morne Rouge: great wave; many lives lost.

It will be seen that the interval is increasing and each time the culminating explosion of steam and hot waters has been somewhat more violent, though until recently there have been no good records kept. At present Lacroix is recording the phenomena from day to day. There were minor eruptions other than those above recorded, notably on May 26, three times in June, and after August 21; but those tabulated may be described as eruptions of first magnitude.

Exploration of the craters has shown that they contain boiling water during periods of calm, and the eruptions begin with the ejection of this water; steam follows, charged with débris. An eruption of this kind is comparable to a geyser. If such comparison is permissible, the sequence may indicate for each great eruption a release of strain and an increased cavity system, allowing infiltration of larger volumes of water, and requiring a