NEW-YORK, MARCH 31, 1790.

ON the 12th of February, at seven in the evening, a tremendous fire broke out at Point Petre, in Guadaloupe, and was not extinguished till midnight. There were twenty five capital buildings consumed, besides a number of smaller ones—the whole loss estimated at six millions of livres. We are happy to add, that a number of vessels belonging to the United States were lying in the harbor, the masters and crews of which exerted themselves in the most signal manner on this distressing occasion; and the assistance they lent was esteemed so important as to entitle them to receive the thanks of the public by a committee from the citizens of the town, as follows:

By a Committee of the Citizens of Point a Petre, to the Americans now amongst us:

Brave and generous Friends and Allies,

THE unfortunate persons who have suffered by the late mercileſs fire in this town, feel themselves under the most lasting obligations to you, for your so generously exposing your own lives in endeavouring to save their effects and property from ruin.

Such as have escaped the rage of this devouring element, are no less indebted to you for their lives—your presence of mind, strength and resolution in arresting its fatal progress, lay claim to a lasting remembrance from every inhabitant of this place.

This unfortunate accident was not necessary to prove, that all mankind are brethren; much less, to convince the French of your sincere attachment to them.

It is the wish of the committee that the address may, in the most public manner testify their grateful acknowledgments for your services on this melancholy occasion; and that a copy of the address may so far merit your approbation, as to be sent to the minister of France, that it may be forwarded and presented to the representatives of the United States of America—And may a people so illustrious and so generous as the Americans, enjoy all the prosperity and happiness of which they are so highly deserving.

Done and concluded by the committee at Point a Petre, this 18th of February, 1790.

(Signed)

Vian. J. Cadiot Lombard-Rebian.

Blondet.

Magagnos.

Delort. Buident } Sec'rys.
Irousel. }

To the Honorable the President and Members of the Committee of the town of Point a Petre, Grand Terre, Guadaloupe, &c. &c.

GENTLEMEN.

We, the masters, commanders, and mariners of the ships and other vessels belonging to the United States of America, now riding at anchor in this port, do acknowledge the receipt of your affectionate and polite address, for which, from this singular testimony of your allied friendship, we beg leave to return you our most hearty and sincere thanks.

The many eminent and often repeated services, that we and our fellow-citizens of America received from your august nation, at a time when we were groaning under the tyranny and oppression of Britain, will ever leave a deep impression of gratitude and esteem upon our minds for the good people of France.

The encomiums you are pleased to bestow upon us are in the highest degree flattering; at the same time permit us to say, that we performed no more than a duty we owed to ourselves upon the principles of humanity, philanthropy, and good will to all mankind. We are sorry that the smalness of our number did not permit us to lend a more effectual aid in sooner terminating this destructive conflagration; but, if our efforts had only contributed to save a single individual from distress, we should consider those moments of dangerous exertion as the happiest of our whole lives.

Give us leave to add, gentlemen, that we shall ever have at heart the particular welfare, prosperity and happiness of the citizens of Point Petre, as well as of this respectable and flourishing colony in general. Long may you enjoy the happy fruits, and every advantage and benefit arising from an unrivalled commerce; a commerce which is at this moment the envy of your neighbours, as being under the protection and influence of that benign genius of liberty in whose cause your nation has so nobly and conspicuously distinguished itself. We shall conclude, gentlemen, with expressing our warmest wishes, that you may long be participators in the blessings of health, peace, and prosperity; the patrons of honor and justice in your community; and that our mutual friendship may never again be interrupted, by our vessels being excluded from the commerce of this port. With the most ardent wishes for the welfare of yourselves and your families—we remain, gentlemen,

With every acknowledgment
of respect, your most obedient
and humble servants,
(Signed in behalf of the Captains, &c.)
JOHN STEPHENSON.

The following Observations on GYPSUM, Or PLAISTER of PARIS, *by Dr.* LOGAN, *of Pennsylvania, accompanied the* Experiments, *in our last.*

GYPSUM, which has acquired the name of Plaister of Paris from its abounding in the neighborhood of that city, is of a stony nature, yet soft and easy to be scraped with a knife. It is found in many parts of the earth in very great quantities, forming hills of a considerable extent, as in the vicinity of Paris, in the bay of Fundy, in Russia, and in many other parts of the world. It is found under different appearances.

1st. Chrystalized into transparent plates, which can be easily separated with a knife, and which, in some part of Russia, are said to be so large as to answer the purpose of glass.

2d. Of a fibrous texture, and composed of oblong concretions lying across the mass.

3d. Composed of small chrystaline grains; this species is called alabaster, when it has a hardness capable of receiving a polish.

In the crata of Mount Mart near Paris, all the above varieties are found, and also a stratum of a less perfect matter filled with small shells: a specimen of which I have in my possession: I have also a beautiful specimen of the chrystalized gypsum, lately brought from the Bay of Fundy.

Every kind of gypsum, however different in exterior form or appearance, have all a perfect resemblance in their chemical and essential qualities.

It is generally allowed that gypsum is principally composed of calcarious earth, but it is not so well ascertained with what substance it is united, which prevents it from having the power of quick lime when burnt. Regarding calcarious earth as forming the basis of this substance, it may be necessary to take notice of the different forms under which calcarious earths appear.

That which is in the greatest quantity, and properly called calcarious, is distinguished from the rest from the effect which fire has upon it, in converting it into a quick lime; all others should rather be termed alkaline absorbents. Calcarious earth appears in a variety of forms; there are very considerable strata of it in the bowels of the earth, as marble, limestone, and chalk, which differ only in the degree of purity or mode of concretion.

It is often found in veins filling up the rents or cavities of mountains, and is called calcarious spar: some of which contain a quantity of this earth, but not in a pure state: some are perfectly transparent: and from being found in Iceland, are called Iceland crystals.

The matter with which animal and vegetable substances are incrusted, or penetrated by the waters of particular springs, so as to retain their external form, but lose their nature and become stone, is generally of this kind; and shews that this earth is capable of being dissolved by water, and being introduced into the texture of animal and vegetable substance. This earth also produces the large pendulous columns and cones that are found hanging from the roofs of large caves, as in Derbyshire.

The stony shells of all crustaceous animals, from the coarsest, to the coral and pearl, are all composed of this earth, and a small quantity of animal glue. A viscid fluid proceeds from the surface of the animal, which becomes a tough membrane, and gradually hardens into this form. The shells of all kinds of animals, together with all coraline concretions consist of the calcarious earth, united with a small proportion of animal glue.

Marle is an alkaline earth, but cannot be converted to quick lime: it is composed of calcarious earth and clay: and its value as a manure is estimated in proportion to the quantity of calcarious earth which it contains. Marles assume a variety of colors, but are properly divided into shell and stone marle.

Shell marle is composed of the shells of shell fish, or other aquatic animals, which are sometime entire, and often decayed or mixed with other earthly substances.

Examining this matter as occuring in different places, it may be distinguished into fresh water marle and the marle of sea shells. The first is composed of a small fresh water wilk or snail: this animal when alive is not easily discoverable, the shell being much of the same color as the stones covered with the water, but great numbers of them are to be found in many small brooks, particularly in their passage through the low wet grounds; as the animal dies the shell is deposited.

The second composed of sea shells constitutes much greater collections, and are found in innumerable places now far removed from the sea.—That most particularly described by naturalists, is a collection of this kind in Touraine, a province in France. This part of the country, where it is found, is computed to contain 80 square miles of surface; and wherever they dig to a certain depth they find this collection of shells, composing a strata of 20 feet thick The country at present is 108 miles from the sea.

The stone or clay marles bear more or less a resemblance to clay; they are very various in their color, and other appearances, but agree in containing a quantity of clay united with calcarious earth, so as to effervesce with acids—The stone marles are harder than the clays, but being exposed to the action of the sun and frost, they crumble into powder. which is easily mixed with the soil, though some of them require a very long time before they are divided fine enough to be mixed completely with it.

These are the principal forms in which calcarious earth is found. They all derive their origin from the calcarious matter of shells; for we find relics of shells in by far the greatest number of limestones, chalks, gypsums, and marbles.

In what manner these great changes in nature have been brought about, will perhaps never be discovered; but they certainly indicate a prodigious revolution in this globe.

We know of no country where gypsum is made use of as a manure for grain: In some parts of Germany and in Switzerland, it has been used upon grass. Monsr. de Lazowsky, in a short account of the agriculture of Switzerland, inserted in Young's annals, vol. 8, observes, that "in Alsace their meadows are well managed, and I have been assured that they have a powerful manure in plaister stone, or gypsum, not burnt, but pounded to powder.—An intelligent person who cultivates for his amusement, and as an amateur, told me that the effect was astonishing upon clover, and in general much greater upon light than upon strong lands; it is so sure that slight failure must not disgust."—Mr. Young, in a note upon the above passage, says he hopes he shall hear from R. S. on this subject, it is an important one.

By this note it appears that Mr. Young, the most intelligent and best farmer in England, is ignorant of the use of gypsum as a manure; although it abounds in many parts of England. They have lately renewed their farms, and made them very productive by the use of marle, particularly in the light sandy lands of Norfolk; formerly the worst, now the best cultivated county in England. The basis of marle and gypsum is calcarious earth; the one united with clay, the other with a substance not clearly ascertained; both have their origin in the decay of shells, and when put on the ground produce similar effects. Arable ground covered with either, will have on the surface a milky appearance during dry weather; both answer best as a manure upon sandy, gravelly or light lands, and when applied as a top dressing to grass or pasture lands, they equally produce a great luxuriancy of white clover, giving the grass a rich black color.

From the natural history of these fossils and their effects in promoting vegetation, we may conclude that they contain in themselves a certain nourishment to plants, arising from a concentration of the animal glue existing in their original state of shell fish; too much pains cannot be taken to engage our farmers generally in the use of these valuable manures. I am gentlemen with great respect, your friend,

GEORGE LOGAN.

Stenton, October 3, 1789.

Read before the Agricultural Society of Pennsylvania.

PREMIUMS

Proposed by the PHILADELPHIA SOCIETY for promoting AGRICULTURE, *for the year* 1790.

I.

FOR the best experiment made of a course of crops, either small or large, on not less than four acres, agreeable to the English mode of farming,—a piece of plate, of the value of two hundred dollars, inscribed with the name and the occasion; and for the experiment made of a course of crops next in merit,—a piece of plate, likewise inscribed, of the value of one hundred dollars. Certificates to be produced by the 20th of December, 1790.

II.

The importance of complete farm or fold-yards, for sheltering and folding cattle,—and of the best method of conducting the same, so as to procure the greatest quantities of compost, or mixed dung and manure, from within the farm, induces the society to give, for the best design of such a yard, and method of managing it, practicable by common farmers,—a golden medal; and for the second best,—a silver medal. The design to be presented to the society by the 20th of December, 1790.

III.

For the best method of raising hogs, from the pig, in pen or sties; from experience; their sometimes running in a lot or field not totally excluded if prefered,—a gold medal; and for the second best,—a silver medal. To be produced by the 20th of December, 1790

IV.

For the best method of recovering worn-out fields to a more hearty state, within the power of common farmers, without dear or far-fetched manures; but by judicious culture, and the application of materials common to the generality of farmers; founded in experience,—a gold medal; and for the second best.—a silver medal. To be produced by the 20th of December, 1790

V.

For the best experiment, soil and other circumstances considered, in trench-plowing, not less than ten inches deep, and accounts of the effects thereof, already made or to be made, on not less than one acre,—a gold medal; and for the second best,—a silver medal. To be produced by the 20th December, 1790.

(To be continued.)