MOSS, CORSICAN.—*Mousse de Corse*, Codex Med.; *Helminthocorton*, Worm Moss, etc. The alga properly known by this name is *Alsidium Helminthocorton* Ag. (order *Florideæ*), a small, brown, marine plant, with a tufted thallus of simple or sparsely forked, pointed, thread-like branches, from 3 to 4 cm. long. It is a native of the Mediterranean Sea, and was formerly collected on the shores of the island of Corsica, from which it receives its name. The anthelmintic mixture, however, still to be found in European pharmacies under this name, includes, besides this, several other related algæ, among which species of *Ceramium*, *Polysiphonia*, *Gigartina*, etc., are commonly met with. There is nothing unusual in the composition of any of the above to explain their former reputation as vermicides; they contain iodine, bromine, soda, etc., in composition, and an abundance of vegetable jelly.

As a medicine Corsican moss is of the past. A decoction is occasionally given to children as a domestic remedy for lumbrici, etc. *W. P. Bolles.*

MOSS, ICELAND.—Cetraria. "Cetraria Islandica (L.) Ach. (Class *Lichenes*)" (U. S. P.). This is a good-sized terrestrial lichen, with an upright or ascending, long and narrow, leathery, wavy-margined, olive-green thallus, several times dichotomously branched or irregularly fan-shaped, with linear or cuneiform lobes. *Apothecia* shield-shaped on the upper surface of the thallus. This lichen grows in great abundance on the surface of the ground in open woods and heaths, and on mountain sides, in the arctic and the colder temperate regions of both hemispheres.

It is a valuable pasture plant in the extreme North, and is also employed as an article of human food in parts of northern Europe. Its medical employment is one or two centuries old.

Dried Cetraria is thus described:

From 5 to 10 cm. long, foliaceous, irregularly branched into fringed and channelled lobes, brownish above, whitish beneath, and marked with small, depressed spots; brittle and inodorous; when softened in water, cartilaginous, and having a slight odor; its taste is mucilaginous and bitter.

It should be freed from pine leaves, mosses, and other lichens, which are frequently found mixed with it.

Composition.—About two-thirds of it is *Lichenin* or *moss starch* $(C_6H_{10}O_5)_x$, a starch-like substance, structureless, soluble in boiling water, the solution gelatinizing upon cooling. It is an article of commerce as a gelatinous mass or a white powder. The properties of this substance are purely demulcent. *Cetrarin* or *cetraric acid* ($C_{18}H_{16}O_8$) is the bitter principle, and gives to the drug its slight medicinal properties. It occurs in commerce in white masses of fine needle-shaped crystals, soluble in boiling alcohol, in alkalies, and very slightly in water. It is distinctly stomachic, like other bitters, and antiemetic. It also has the distinct property of increasing the red corpuscles of the blood. It is therefore in an exceptional manner tonic. Isolichenin is very similar to lichenin, but gives the starch reaction with iodine. It is apparently not active.

Iceland moss is a very useful demulcent, and has gentle tonic qualities, for which it is indebted to the two active principles above mentioned. It has no specific action upon the bronchi or lungs, and its value in bronchitis, etc., for which it is mostly prescribed, must be due to its combined demulcent and tonic actions. Dose, indefinite; a decoction is official.

Cetrarin is given alone for all except the demulcent properties, in doses of 0.01 to 0.02 gm. (gr.ij.–v.).
Henry H. Rusby.

MOSS, IRISH.—Chondrus. *Carrageen.* "*Chondrus crispus* Stackhouss, and *Gigartina mamillosa* J. Agarch (class *Algæ*)" (U. S. P.). A reddish-brown or purplish alga, with a flat, many-times forked or lobed thallus, of

Fig. 3375.—Irish Moss. (Luerssen.)

very variable appearance, sometimes with broad, flat, wedge-shaped, wavy, and incised, margined lobes, at other times with linear, roundish, blunt, or emarginate ones. It is from 5 to 20 cm. high, of a translucent, gelatinous consistence. The fructifications (cystocarps) are embedded in the substance of the thallus, along the smaller branches, where they can be felt as little, wart-like indurations beneath the surface. This alga grows abundantly along the rocky shores of Western Europe

and Eastern America, that is, on each side of the North Atlantic. It has for a long time served as an innutritious food, and as the basis of vegetable jellies for the table; it is also, in some localities, fed to cattle, and used as a stuffing for cheap mattresses. Its employment in medicine is of recent date, and entirely unimportant. It is collected on the coast of Ireland and elsewhere in Europe, also upon that of New England and elsewhere in America. For medical or table use it is bleached in the sun, washed, and dried.

DESCRIPTION.—Irish moss shrinks considerably in drying, and if exposed to the sun, or repeatedly wet and dried, bleaches to a yellow color. It is, when dry, hard, horny, and brittle, but resumes its original size and consistence after long soaking in water. In boiling water it almost completely dissolves. Taste mawkish, mucilaginous, and more or less saline, according to the thoroughness with which it has been cleansed. It will make a stiff jelly with twenty or thirty times its weight of water.

COMPOSITION.—Chondrus consists chiefly of a mucilage, common also to many other algæ, swelling and nearly dissolving in water, and drying to a hard, transparent substance. It is precipitated by alcohol, and holds tenaciously about one-seventh its weight of mineral matter. It contains, in common with other marine algæ, minute quantities of iodine and bromine compounds.

MEDICAL EMPLOYMENT.—For colds, coughs, and especially acute pharyngitis, a thin mucilage (decoction) made of Irish moss is a popular household remedy, and corresponds exactly with the mucilage of elm and flaxseed, made in the same way. It may be sweetened and flavored with lemon. Boiled with milk it makes an agreeable jelly ("blanc-mange"), often used as a sick diet, whose value depends on the milk.

W. P. Bolles.

MOSSES.—(Class *Musci.*) The true mosses, while very ornamental, and of great biological and botanical interest, are insignificant from an economic standpoint, while to the Materia Medica they yield not one important substance. Some of them, like Sphagnum and Polytrichum, have, upon totally unscientific grounds, been used domestically in menstrual disorders. Others, like *Funaria hygrometrica* Hedw., have some reputation as expectorants, the effect probably depending chiefly upon the syrup used as a vehicle. Many have been very useful, in the absence of more refined agents, as substitutes for tow, oakum, and lint. The preceding, much used under the title of Mosses, are not of this class at all.

Henry H. Rusby.

MOUNTAIN SICKNESS. See *Altitudes, High.*

MOUNTAIN SPRINGS.—Lancaster County, Pennsylvania.

POST-OFFICE.—Ephrata. Hotel.

ACCESS.—Viâ Reading Railroad. Trains leave Reading Terminal, at Twelfth and Market Streets, Philadelphia, daily, except Sundays, at 10 A.M. and 4 P.M., arriving at the springs at 12:44 and 6:45 P.M.

This pleasant resort is located on the western slope of the Ephrata Mountain, one of the highest points of land in Lancaster County. Many charming features of climate and scenery are united here. The visitor will find pure air, a comfortable and well-kept hotel, excellent fishing, and delightful surroundings at this summer resting-place. The water of the Mountain Springs is celebrated for its purity and sparkle. It has not been analyzed, but we are credibly informed that it contains iron and carbonic acid gas. The springs discharge about three thousand gallons per hour. *James K. Crook.*

MOUNT CLEMENS MINERAL SPRINGS.—Macomb County, Michigan.

POST-OFFICE.—Mount Clemens. Hotels.

ACCESS.—From Detroit viâ Chicago and Grand Trunk Railroad, twenty miles northeast. These waters are very strong brines, as shown by the following analyses made by Prof. S. P. Duffield:

ONE UNITED STATES GALLON CONTAINS:

Solids.	Mount Clemens Mineral Well. Grains.	Media Spring. Grains.	Soolbad Spring. Grains.
Calcium carbonate	0.98	91.0	Trace.
Magnesium carbonate	.7	.7	Trace.
Iron carbonate	5.6	.....	
Sodium sulphate	.....	.....	
Calcium sulphate	100.56	14.3	44.0
Potassic salts	.....	Trace.	Trace.
Sodic salts Calcic salts Magnesic salts	.....	11,741.0	11,181.0
Iron sulphide			
Sodium chloride	11,900.0		
Calcium chloride	934.5		
Magnesium chloride	648.48		
Magnesium iodide	.07		
Magnesium bromide	6.37		
Iron	.....	8.5	Trace.
Alumina	29.47	29.0	11.21
Silica	27.6	28.0	
Bromide	.....	8.5	Trace.
Iodide	.....	.07	.05
Ammonia	.....	Trace.	Trace.
Organic matter			
Total	13,654.33	11,921.07	11,236.26

Gases.	Cubic inches.	Cubic inches.	Cubic inches.
Hydrogen sulphide or dihydric sulphide	40.00	40.00	33.00
Carbonic acid	5.85		
Nitrogen	Present.		

These waters resemble those of Achsel-Mannstein, in Bavaria. It is necessary to dilute them both for internal use and for bathing. They have acquired considerable reputation in the treatment of scrofulous disorders of the skin, bones, and joints, and for the improvement and even cure of paralysis when the disease depends chiefly upon innervation without decided lesion of the brain or spinal cord. Cases of chronic rheumatism with stiffened joints and obstinate cases of neuralgia may also find relief. The waters are used commercially.

James K. Crook.

MOUNT DESERT, MAINE.—The island of Mount Desert, the largest one on the New England coast, lies off the coast of Maine, nearly midway between Portland and Eastport, about one hundred and ten miles east of Portland and forty miles southeast of Bangor. It is a very popular summer resort and has wide notoriety.

The island has an area of about one hundred square miles, and is fourteen miles long and eight miles wide at the widest part. A chain of mountain peaks extends across it from southeast to northwest, these peaks being separated from one another by deep gorges and ravines, which at several points descend below the level of the sea.

The average elevation above the sea-level is almost 500 feet, and Green Mountain, the highest point, is 1,527 feet in height. The coast line is bold and rocky and much indented. "Somes Sound," a fiord of the sea seven miles long, runs up to nearly the centre of the island, cutting through the centre of the mountain range. The various indentations, or bays, furnish many good harbors, such as Bass Harbor, Southwest Harbor, Northeast Harbor, Seal Harbor, and Bar Harbor—the finest of all, lying upon the broad Frenchman's Bay.

The island is well wooded with pine, balsam, and spruce, although numerous fires have made sad havoc with the forests. Inland, in the valleys and high up among the mountains, are many beautiful lakes and ponds, the most extensive being Eagle Lake at the foot of Green Mountain, Echo Lake, Jordan's Pond, and Long Pond.

Lying about Mount Desert are numerous smaller islands which are attractive and picturesque, the principal of

which are the Porcupines at Bar Harbor, the Cranberry Islands, near Southwest Harbor, and Bear, Baker's, Duck, Greening's, and Sutton Islands. "The western sides of the mountain range slope gradually upward to the summits, but on the east they confront the ocean with a series of stupendous cliffs" ("Appleton's General Guide to the United States and Canada").

The island is of granite formation, exhibiting evidences of the great glacial movement; and the soil is dry and porous. On the northern side the mainland is separated from the island only by a narrow stream, and a bridge affords communication between the two. The scenery of the island is most attractive, varied, and grand, affording innumerable delightful excursions by land and by sea. Good roads and footpaths extend in every direction, and in the town of Eden alone there are one hundred and twenty miles of excellent road. The reader is referred to the various guide books for an enumeration and description of the many excursions and various points of interest. Mount Desert has become such a popular resort that every facility is afforded the visitor for enjoying and exploring its beauties. Local steamers run from one point to another of the island; hotels and boarding-houses of various prices abound; and the island can be easily and comfortably reached either by rail or by boat from Boston and Portland.

Bar Harbor is the most frequented and fashionable resort, and the cottage life has quite supplanted that of hotels and boarding-houses. Here beautiful and luxurious cottages abound, and in the season the social life resembles that of New York or Philadelphia in winter.

Every kind of outdoor and indoor diversion is afforded. There are many clubs and churches of various denominations. The Kebo Valley Club offers opportunities for golf on its attractive grounds, and sometimes during the summer the North Atlantic Squadron pays a visit to Bar Harbor, and during "Squadron Week" social gayety is at its height.

The water supply of Bar Harbor is taken from Eagle Lake, two hundred and forty feet above the village, and is abundant and pure. There is also an extensive and thorough system of sewerage. There are adequate protection against fire; many shops and good markets; excellent postal, telegraph, and telephone accommodations; two banks; a good police force; an intelligent and efficient board of health, and good medical service. The streets are lighted by electricity, which is also furnished to private residences.

Northeast Harbor and Seal Harbor are much frequented by "cottagers," and at the former is the attractive Episcopal Church founded by Bishop Doane of Albany. Southwest Harbor is beautifully situated at the entrance to Somes Sound, and is a favorite resort for those desiring a more quiet and simpler life. Indeed, almost any portion of the island has its especial attractions for the summer resident, and one can visit the island year after year and always find some new portion to explore. "On the coast of America it (Mount Desert) has no rival, except, perhaps, at the bay of Rio Janeiro" (Appleton, *loc. cit.*).

Through the kindness of William Miller, Esq., of Bar Harbor, who made the observations, and the chief weather forecaster at Boston who placed them at my disposal, the following compilation has been made of the climate of Mount Desert. In general it may be said that the summer climate is a cool, invigorating one, with a fair number of clear days and the average amount of rain for this latitude. Fogs are not infrequent and they sometimes last for several days or even a week.

There are no recorded observations of the humidity, but it cannot be very different from that of Eastport on the same coast, about eighty miles to the northeast. There the average relative humidity for July is 78.7 per cent.; August, 78.9 per cent., and for the year 76.3 per cent. The variations in temperature are considerable, and the air is apt to be chilly and damp. Such a climate would hardly be suitable for the delicate, for those who had a tendency to or were suffering from pulmonary or bronchial troubles, or from neuralgia. For any one who needs the influences of a bracing, cool, summer climate, or for a convalescent from any acute disease, who is well on the road to recovery, it can be recommended. It is also useful in some cases of neurasthenia and insomnia.

Some patients who are subject to hay fever find immunity on the island at one or the other harbors, especially at Northeast Harbor. *Edward O. Otis.*

CLIMATE OF MOUNT DESERT ISLAND, MAINE, LATITUDE 44.38° N., LONGITUDE 68.36° W., FOR THE YEARS FROM 1896 TO 1901. OBSERVATIONS OF WILLIAM MILLER, ESQ., OF BAR HARBOR.

Data.	January.	April.	June.	July.	August.	September.	October.	Year.
Temperature (degrees Fahrenheit)—								
Average or normal	21.08°	42.4°	59.48°	65.9°	64.9°	58.6°	48.5°	39.4°
Average range	19.3	21.7	22.8	22.2	22.2	22.0	21.3	
Mean of warmest	30.7	53.6	71.1	77.2	76.3	70.1	59.3	
Mean of coldest	11.4	31.9	48.3	55.0	54.1	48.1	38.0	
Highest or maximum	49.0	72.8	86.3	90.5	89.0	87.6	73.8	
Lowest or minimum	− 11.5	18.6	37.8	45.0	43.8	33.2	24.4	
Precipitation—Average in inches	5.60	3.14	2.85	3.86	3.28	3.77	4.62	
Wind—Prevailing direction	N. W.	E.	S. W.	S. W.	S. W.	S. W.	S. W.	S. W.
Weather—								
Average number of clear days	11.2	15.1	16.5	18.3	17.6	15.3	14.3	
Average number of partly cloudy days	8.2	6.3	7.5	6.0	6.5	7.8	8.3	
Average number of clear and partly cloudy	19.4	21.4	24.0	24.3	24.1	23.1	22.6	

MOUTH, DISEASES OF. See THE APPENDIX.

MUCOID DEGENERATION. See *Degenerations, etc.*

MUCOUS MEMBRANES: INFLAMMATIONS OF.—The subject of inflammations of the mucous membranes is treated in this article in only a very general way. The specific inflammations (diphtheria, tuberculosis, syphilis, rhinoscleroma, gonorrhœa, erysipelas, influenza) will be discussed under their respective heads; the object of this article being to include only the simple non-specific forms of inflammation of these structures according to the definition of inflammation as given by Ziegler —namely, a tissue lesion accompanied by circulatory disturbances, an exudate, and tendency toward repair.

ETIOLOGY.—Although inflammations of different mucous membranes have somewhat different etiological factors, all have to a varying degree a common etiology.

The causes of inflammations of the mucous membranes are direct or indirect. Among the indirect causes are changes in temperature, gout, rheumatism, bad hygiene, decayed teeth, diseases of the circulatory, digestive, or respiratory systems, reflex influences, and idiosyncrasy.

The direct causes of inflammations are thermal, electrical, chemical, mechanical, neoplastic, and bacterial.

The application of hot or cold liquids and instruments to the mouth, pharynx, vagina, or urethra may cause a stomatitis, pharyngitis, colpitis, or urethritis. Breathing of hot air may cause a tracheitis or a bronchitis.

Electricity, applied by means of an electrical sound to the œsophagus or urethra, may cause an inflammation of the mucosa.

Certain chemicals, both organic and inorganic, produce inflammation when they come in contact with mucous membranes. The irritating substance may be mineral acids, alkalies or salts, gases, organic compounds, and