

strength. For disinfecting the hands and cleansing the body of the patient, a five-per-cent. solution is used by rubbing into the parts thoroughly, and then washing it off in a solution of one or two per cent. For disinfecting instruments and for irrigation during an operation a one- or two-per-cent. solution is prepared, and for gynecological and obstetrical purposes a solution of one-half per cent. is sufficient.

On mucous surfaces, when used in stronger solution than two per cent., it causes a burning and painful sensation which lasts for some time, but otherwise is perfectly un irritating.

Lysol was recommended for internal administration as an antiseptic remedy, but has not proved of much service. In Europe it is more frequently used as an antiseptic injection in disturbances of the lower bowel, a solution of the strength of one per cent. being employed.

Beaumont Small.

LYSOL, POISONING BY.—Lysol is a coal-tar product containing a considerable amount of cresols (methylphenols) which by conversion into sodium salts have been rendered soluble in water. It is used a good deal as an antiseptic wash, and cases frequently occur in which it is the cause of poisoning by being mistaken for other substances in use in the sick-room. Out of 18 cases recently collected from current literature, 13 were from internal and 5 from external use of the remedy. Nine of the cases resulted fatally: 5 children and 1 adult after internal use and 2 children and 1 adult after external application of the pure lysol when the 1-per-cent. solution had been ordered. The largest dose from which recovery is recorded is 60 gm. (about gr. 925) in the case of a woman and 25 gm. (gr. 385) in a four-year-old child. The smallest doses that have proved fatal were a teaspoonful (about 4.3 gm. or gr. 70) in children between five and eight years old.

The recent cases show that the prompt washing out of the stomach freely with water has been attended with satisfactory results, while the neglect of this was usually fatal. The solution should never be used externally in strength greater than one per cent., nor more than 0.5 per cent. internally.

The following recently reported case will serve to show the general nature of severe lysol poisoning. A child of nearly two years old drank a teaspoonful of lysol at 8 P.M. Milk was given at once, but unconsciousness soon supervened without cramps or vomiting. At 8:15 when the physician saw the child, the pulse was 160, small and irregular, cyanosis marked; corneal and pupillary reflexes were absent. The mouth contained considerable mucus, and the mucous surface was corroded, as was also the skin at the corners of the mouth and on the chin. At 8:30 P.M. the stomach was washed out with water until the effluent had no odor of lysol. Camphor and ether injections were used. The child improved, consciousness returned, but there were several attacks of vomiting during the night. Next morning, the temperature was 102.2° F. and pulse 120, moderately strong, but dyspnoea developed, the oedema of the lung increased, unconsciousness again supervened, and the patient died at 3 P.M., nineteen hours after taking the poison.

The local effects of lysol will resemble those of phenol in some respects, but the corrosive effects will be less marked. On the other hand, the general effects of lysol are well-marked features of its action, and death may occur without extensive local injury. The above case was treated by washing out the stomach, but rather late and after much lysol had been absorbed.

Henry Leffmann.

LYSULFOL is a thick black viscous liquid containing lysol and sulphur. It is miscible with water and is used by Rumpf in skin diseases.

W. A. Bastedo.

MACE.—*Macis. Banda Mace.* The arilode of the seed of *Myristica fragrans* Houttuyn (fam. *Myristicaceae*). The origin and preparation of mace are fully explained

under *Nutmeg*. It occurs in narrow bands, 2.5 cm. (1 inch) or more long, somewhat branched and lobed above, united into broader bands below; orange-brown, exuding fat when scratched or pressed; odor fragrant; taste warm and aromatic. In the ground condition, mace is almost always grossly adulterated, especially with the wild or Bombay mace, from *Myristica Malabarica*. This is longer and more slender, of much darker color, softer, weaker, and more flexible and contains very little volatile oil, but a good deal of resin, by means of which its powder is readily distinguished. Curcuma, ginger, and similar substances are also considerably used in the adulteration of mace, and are readily distinguished by a similar resinous nature, as well as by their starches.

A good mace contains eight per cent. or more of volatile oil, a large amount of fat, very little resin, a little sugar, and other ordinary vegetable constituents. It is free from starch. The ash should not exceed two per cent. and in a clean article is considerably less.

The volatile oil of mace is slightly heavier than that of nutmeg and is soluble in three parts of alcohol. It is of complex composition, being identical in this respect with oil of nutmeg, except that its content of terpene is somewhat smaller. Owing to this practical identity of the two oils and the greater cheapness of oil of nutmeg, it happens that commercial "oil of mace" is almost without exception oil of nutmeg.

The action, uses, and dosage of mace are those of nutmeg.

Henry H. Rusby.

MADDER.—*Rubia.* The root of *Rubia tinctoria* L. (fam. *Rubiaceae*). *Rubia* is a perennial herb, native of the Orient and extensively cultivated there. The dried root is cylindrical, elongated, 0.3 to 1 cm. ($\frac{1}{4}$ to $\frac{3}{8}$ inch) in diameter, externally dark reddish-brown, internally somewhat lighter to pink. It is of soft texture, slight odor, and a sweetish, slightly astringent and bitter taste, tingling the saliva red. It is of complex composition, the source of its coloring matter being one or more glucosides which are decomposed by various processes employed in forming it. The drug has entirely lost its place as a medicinal agent and is now exclusively used for dyeing. Even this use has largely declined under the influence of the aniline dyes.

Henry H. Rusby.

MADEIRA.—The island of Madeira, the largest of the group of islands bearing that name, lies off the Morocco coast of Africa at a distance of about three hundred and sixty miles, and about three hundred miles to the north of the Canaries. It is one of the best types of the warm moist climates, and some fifty or more years ago was considered by the English the ideal climate for pulmonary tuberculosis and other lung diseases: much in the same way as Florida in this country was formerly regarded as the Mecca for consumptives. The extent of the island is about thirty miles from east to west, and thirteen miles wide. Extending from one end to the other is a range of mountains averaging 4,000 feet in height, with a maximum of 6,100 feet (Pico Ruivo, in the centre of the island). The side ridges of this central chain extend to the coast in every direction, usually terminating in lofty headlands. The north coast is more precipitous and wilder than the south. The soil is fertile, and on the mountain slopes are gardens with luxuriant semitropical vegetation and vineyards.

Madeira belongs to Portugal and "the inhabitants are of Portuguese descent, with some admixture of Moorish and negro" (Solly). The population of the two inhabited islands, Madeira and Porto Santo, is about 134,000. Funchal, the capital and largest town of Madeira (population 22,000), lies upon the south coast, and is built around the curving shore of a bay, extending up the encircling hillside to a height of 350 feet or more above sea level. It is sheltered from the northerly winds, which are prevalent, by the mountain chain, and is the usual place of residence selected by invalids resorting to the island during the season which extends from September to May, though one can spend the summer comfortably

ANNUAL AVERAGES.

	Latitude.	TEMPERATURE. (DEGREES FAHRENHEIT.)			Relative Humidity.	Rainfall.	Cloudy Days.
		Mean for January.	Mean for July.	Mean Annual.			
Madeira	32°30' N.	60.4°	71.1°	66.2°	70.75%	29.0	110.0
Jupiter, Fla.	26°57' N.	63.4	80.5	73.4	82.	62.1	79.8
Key West	24°34' N.	70.3	84.	77.5	73.9	40.8	59.1
Jacksonville	30°20' N.	55.8	82.5	69.2	72.	54.6	85.1
Santa Barbara	34°28' N.	51.2	66.8	60.7	73.	17.6	71.
San Diego	32°43' N.	53.6	67.1	60.4	72.9	9.49	87.2
Bermuda	32°15' N.	62.5	79.8	70.8	80.	62.54	83.
Nassau	25°5' N.	69.	87.	78.7		56.	
			Summer.			Oct. to May.	
Mentone	43°46' N.	49.3	73.	60.	72.	25.61	80.
Cairo	30°3' N.	53.6	77.9	70.2	58.4	1.22	40.
Aiken	33°32' N.	44.15	78.8	61.61	59.65	48.	

on the island by going up into the mountains. The scenery is very attractive and varied. The roads are very steep, so that wheeled vehicles are rarely used, but in their place palanquins, sledges, and portable hammocks. The sanitation and water are good. The accommodations are excellent, there being several English hotels and furnished villas called "quintas" for rent, situated at various elevations. There are also English and Scotch churches, and an English club and library. There are good fishing and sea-bathing all the year round, the temperature of the water in winter being from 60° to 70° F.

Madeira is reached by steam from Liverpool, London, Southampton, and Plymouth, and from various other ports on the Continent, and is also frequently a point of call by steamers from New York taking the southern route.

As has been said, the climate of Madeira is a mild, moist, marine one, and is consequently a very equable one, not only in the daily but also in the yearly range. The average mean daily range for the year is 9.2° F. and the mean nycthemeral range during the six months, November to April, is only 10° F. The mean monthly range of temperature for each of the five months—November to March—is as follows:

November, 16°; December, 16.9°; January, 16.9°; February, 18.7°; March, 18.9°. The mean annual temperature is 66.2°, and for the winter 61.6°. The extreme range of temperature is from 90.8° to 46.22° F., for eight years of observation.

At Funchal frost and snow are wholly unknown, but snow falls on the mountains once or twice during the winter, very seldom, however, below the altitude of two thousand feet. The mean annual relative humidity is given as from 70 to 75 per cent., and for the five months from November to March, 71 per cent., according to Kisch. During spring and autumn the relative humidity is least. The mean annual rainfall is 29 inches, of which 66 per cent. falls in the four months, November to February. In the winter six months there are on an average fifty rainy days. Lombard gives the number of cloudy days per annum as 110, and of fair and clear days as 189. The prevailing winds are from the north, north-east, and northwest. Generally there are no high winds at Funchal, but occasionally it is visited by the "leste," a hot dry wind blowing from the Morocco coast, chiefly in the spring and autumn.

In the above table the climate of Madeira is compared with various other warm marine climates and with the dry climates of Cairo and Aiken.

The climate of Madeira is not suited, in the writer's opinion, for pulmonary tuberculosis generally, although occasionally individual cases may do well, as in almost any climate. No warm, moist marine climate can be considered favorable for the arrest or cure of this disease, and experience, especially that at Madeira, confirms this statement. For cases of chronic laryngitis with scanty expectoration, chronic bronchitis and emphysema, how-

ever, such a climate is favorable, as well as for that large class of cases characterized by debility. "The feeble, flickering lamp burns longer there than in a more stimulating and tonic air, and now and then it seems to gather renewed power, and burns up again with some of its old lustre." For delicate scrofulous children such a mild marine climate is of value. Kisch regards rheumatism and gout, and also a tendency to diarrhoea and to albuminuria, as contraindicating the Madeira climate.

The American in search of health would rarely seek Madeira, owing to the long and expensive journey which he would be obliged to take. Moreover, he has nearer at hand in Florida, Southern California, and the West Indies, similar or more favorable climates.

Edward O. Otis.

MADRUGA SPRINGS.—These springs are situated in the town of the same name at a distance of about forty-five miles from Havana, Cuba, with which the town is connected by railroad. The number of springs is quite large, but up to the present only three of them have been employed for medicinal purposes, their names being, Paila, Templado, and Tigre.

These springs have been well known for many years and have enjoyed a well-merited fame, but for a long period they were neglected. Finally, the people of the neighborhood formed an association which furnished the necessary funds for erecting the buildings which now exist on the site of the springs. These buildings are substantial in character, made of stone, and roofed with tiles in the picturesque manner of the country.

The building at the Paila is thirty-six feet long by eighteen feet in width, and in the middle there is a partition wall which serves to divide the building into two almost equal parts. One side is devoted to the use of women and children, while the other division is for men bathers. The water that fills both of these tanks issues from a spring located in a well six feet wide by nine feet deep.

The water of this spring is clear, transparent, and has a strong odor of sulphureted hydrogen. This odor is lost on boiling the water or when it is allowed to cool. The temperature of the water is about 23° C.; in reaction it is somewhat alkaline.

The analysis of the water of this spring, according to Dr. Aenlle, yields the following results:

	Gms. per Litre.
Sulphurous acid	.228
Carbonic acid	.112
Carbonate of magnesium	.078
Carbonate of calcium	.485
Sulphate of calcium	.284
Chloride of sodium	.098
Carbonate of iron	.008
Chloride of magnesium	.018
Oxide of aluminum	.013
Organic matter	.049
Total	1.474

A more recent analysis made by Dr. Pons gives a somewhat different result, which is as follows:

	Gms. per Litre.
Sulphate of calcium.....	1.300
Chloride of sodium.....	.020
Carbonate of magnesium.....	.150
Alumina.....	.000
Carbonate of calcium.....	.008
Sulphate of iron.....	
Carbonate of iron peroxide	.198
Silica.....	
Nitrogen or organic matter	
Total.....	1.685

The Tigre Spring has not the volume of the others, but the bathing facilities are also good, the building at this spring containing separate apartments for men and women. The water is colder and has a larger amount of sulphate of iron.

The curative powers of the waters of these springs have long been known by the people of Cuba and they have been acknowledged also by the medical profession. In fact, they enjoy almost as much popularity as do those of San Diego. Dr. Pardini, resident physician and medical director of the bathing establishment at Madrugá Springs, has devoted much attention to the treatment of disease by these waters, and has furthermore published his experiences; I can therefore do no better than quote him. He finds the waters of most benefit in various forms of anemia, and he has published a series of cases in which the blood count has rapidly risen under their use from 3,200,000 to 4,000,000, or even 5,000,000, in less than two weeks.

Although it is well known that cold sulphur water baths are not generally indicated in the treatment of rheumatic conditions, it is nevertheless true that very few sufferers from affections of this nature have failed to derive some benefit from a course of treatment at these springs. Almost all the conditions coming under the heads of arthritis, scrofula, and herpetism seem to improve under their use. The records show numerous cases of bronchitis, dyspepsia, neuralgia, cholelithiasis, cystitis, etc., in which a cure has resulted from a course of treatment at this establishment. The next most common condition among the patients coming to these springs is the group of diseases termed "herpetism." The effect of the treatment on these troubles is truly remarkable, a cure sometimes following a short series of baths. The best results are obtained in the dry form of diseases of the skin. The baths are of course contraindicated during the acute or active period of these affections.

N. J. Ponce de Léon.

MADURA FOOT. See *Actinomyces*.

MAGNESIUM.—I. GENERAL MEDICINAL PROPERTIES OF COMPOUNDS OF MAGNESIUM.—Medicinally, magnesium is notable among metals for its inertness, its compounds exhibiting absolutely no specific effect individual to their basic radical. As a class, magnesian salts tend to be of low diffusion power and purgative, and, as compared with salts of potassium or of sodium with the same acid radicals, are less obnoxious to the taste and are generally milder in action.

II. THE COMPOUNDS OF MAGNESIUM USED IN MEDICINE.—The compounds of magnesium entering into preparations of the United States Pharmacopœia are the oxide ("magnesia"), hydroxide, carbonate, citrate, and sulphate.

Magnesium Oxide, MgO.—Magnesium oxide, the *magnesia* or *calcined magnesia* of common parlance, is easily obtained by exposing to a low red heat the so-called magnesium carbonate of pharmacy. According to special circumstances in the making, magnesia may be comparatively light or comparatively heavy. Two grades of magnesia thus occur in the markets, both of which are recognized by the United States Pharmacopœia. The *light* variety is officially entitled, simply, *Magnesia*, *Magnesia*, while the heavy grade is distinc-

tively styled *Magnesia Ponderosa*, Heavy Magnesia. The market brands of magnesia known, respectively, as *Henry's*, *Husband's*, and *Ellis's*, are examples of heavy magnesia.

Both varieties of the substance are in the form of an exceedingly fine white powder, very light in the case of the simple "magnesia," but dense in the case of the "heavy" article. In both cases the powder is odorless, but with an earthy, though not saline taste; is almost insoluble in water, and quite so in alcohol. In the case of the light variety, one part of magnesia mixed with fifteen parts of water and allowed to stand for half an hour will form a gelatinous magma of magnesium hydroxide. Heavy magnesia, on the contrary, does not readily react in this way. Magnesia slowly absorbs carbon dioxide from the atmosphere, and hence is directed by the Pharmacopœia to be kept in well-closed vessels.

Magnesia is strongly alkaline in respect of power of saturating acids, but, from its feeble solubility, shows scarcely a trace of the physiological properties exhibited by the soluble alkalies potassa and soda. Locally, magnesia has only the negative properties of a light, smooth, insoluble powder, but taken internally it neutralizes acids in the primæ viæ, and in the condition of a soluble magnesian salt thus resulting proves mildly laxative. As an internal medicine, in short, magnesia combines the properties of an antacid and a laxative, and is used exclusively for obtaining the effects of such virtues, either singly or together. Thus it may be prescribed as a simple laxative in constipation, a simple antacid in "sour stomach," or as a medicine of both virtues when, in the case of irritation of the intestines from the products of sour fermentation of the food, both an alkaline and a laxative effect are needed. When given as a simple laxative, it may be necessary to follow the dose of magnesia with a draught of lemonade to secure the necessary acid for the solution of the magnesia. As an antacid, magnesia is given in doses of from 0.65 to 2 gm. (gr. x.-xxx.) and as a laxative from 2 to 4 gm. (gr. xxx.-lx.). It is administered rubbed to a smooth cream with water or milk, and, in general, "heavy" magnesias are preferable to the "light" variety, by reason of their being more readily miscible with fluids. A mixture of magnesia with water, if not weaker than one part to fifteen, slowly gelatinizes on standing as stated above by formation of magnesium hydroxide, and if kept for a day or two may cake into lumps. And such concretions have been found, post mortem, in the human stomach, after habitual full dosing with magnesia.

Magnesium Hydroxide, Mg(OH)₂.—Magnesium hydroxide, or *hydrate of magnesia*, is not official under its own form, but is an integral part of the composite so-called *carbonate* of the United States Pharmacopœia, and is what forms on allowing an aqueous mixture of magnesium oxide to stand, as above described. Magnesium hydroxide also occurs as a bulky gelatinous precipitate on decomposing, by caustic soda, magnesium sulphate (Epsom salt) in solution. Such a precipitate, washed and diffused in enough water to make the mixture of creamy consistence, constitutes a preparation that is exceedingly convenient as a means of administering magnesia, and which, if the hydroxide have been thoroughly washed and if the water employed for the dilution be perfectly pure, has a mild taste only, resembling that of milk, and will keep without change. A tablespoonful of such preparation is a full antacid dose for an adult, and two tablespoonfuls a laxative. Excellent articles of this preparation are in the market, under the title *milk of magnesia*.

Magnesium Carbonate, MgCO₃.—Normal magnesium carbonate is not used in medicine, but under the title *Magnesi Carbonas*, Magnesium Carbonate, the United States Pharmacopœia makes official the well-known *magnesia alba* of the shops, a composite salt, which may be regarded as a compound, in variable proportions, of normal magnesium carbonate and magnesium hydroxide. The United States Pharmacopœia recognizes the composition represented by the formula (MgCO₃)₂, Mg(OH)₂,

5H₂O. This compound forms as a white precipitate on mixing solutions of magnesium sulphate (Epsom salt) and sodium carbonate. Collected, washed, and dried, it then appears as light, white, friable masses, or a light, white powder, odorless and tasteless, insoluble in alcohol, and almost insoluble in water, to which, however, it imparts a feebly alkaline reaction. When strongly heated, it loses water and carbonic acid gas, and is converted into magnesia. It is soluble in dilute acids with copious effervescence. Magnesia alba is made in two grades of density, technically known, respectively, as the *light* and *heavy*. The difference is said to be determined by the strength of the solutions used for the precipitation, concentrated solutions producing a heavy, and weak a light, product. The United States Pharmacopœia does not contradict distinguish the grades of density nor direct the process of manufacture, and, as a matter of fact, much of the commercial carbonate is prepared from dolomite.

Magnesia alba is practically identical in medicinal properties with magnesia, and may be used for the same purposes as that compound. The former is, however, the inferior remedy, first, because in its uniting with acids in the primæ viæ it necessarily evolves gas—an unpleasant circumstance; and secondly, because it needs to be given in double the doses of magnesia. Magnesia alba is administered, like magnesia, rubbed to a cream with water or milk, an operation which is greatly facilitated by first rubbing the powder with a little undiluted syrup.

Acid Magnesium Citrate (MgHC₃H₃O₃).—This salt is official in the United States Pharmacopœia only in composite pharmaceutical preparations, as follows: *Liquor Magnesi Citratis*, Solution of Magnesium Citrate. The salt is formed in solution by adding the pharmacopœial carbonate to a solution of citric acid; the solution is flavored with syrup of citric acid, and the mixture being put into a twelve-ounce bottle, a small charge of acid potassium carbonate ("bicarbonate") is finally added, and the bottle instantly, thereupon, securely corked, the cork being fixed in place by twine. Reaction now takes place between an excess of citric acid present in the mixture and the potassium carbonate, whereby potassium citrate forms and carbon dioxide gas is evolved. But the bottle being stoppered, the gas is retained and remains in solution under pressure. Thus there is obtained an acidulous, sweetened, and actively effervescing aqueous solution of magnesium citrate, with a little potassium citrate. For the making, the quantity of 15 gm. (gr. cccxxxi.) of magnesium carbonate is ordered for each twelve-ounce bottleful. The solution, in taste, strongly resembles ordinary "lemon soda." *Magnesi Citras Effervescentes*, Effervescent Magnesium Citrate. To make this preparation, magnesium citrate is first formed by mixing magnesium carbonate and citric acid together with enough water to make a paste; the resulting mass is then dried, powdered, and mixed with some acid sodium carbonate, sugar, and additional citric acid, in powder. The whole is then dampened with alcohol, granulated, and again dried. The product is a white, coarsely granular salt, deliquescent on exposure to air, odorless, having a mildly acidulous, refreshing taste, and an acid reaction. It dissolves, with copious effervescence, in two parts of cold water, and is still more soluble in boiling water. It is insoluble in alcohol. This salt furnishes, substantially, in solid form, the ingredients of the foregoing solution of the citrate, and its solution, extemporaneously made, practically represents the official solution of the citrate. The preparation should be kept in well-closed bottles. The proportion of magnesian carbonate ordered for making the granulated compound is ten parts for one hundred of product.

Magnesium citrate is a simple saline purgative, mild in character, not disagreeable to taste, and generally very well borne by the stomach. The agreeable flavoring and effervescent property of the pharmaceutical representatives of the salt make the medicine an especially appropriate one for children, or for use in fevered states requiring the action of a purge. The official solution, it will be observed, comes only in twelve-ounce bottles.

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One bottleful is a purgative dose for an adult, but it is generally given only in wineglassful doses, sipped during the day, so that half a bottleful or more is consumed in the twenty-four hours. The fluid should be ice-cold, and the bottle should instantly be recorked after the drawing off of each dose, and kept, set upside down, in a cool place. But after once opening a bottle, the solution is not good for longer than a day. The granulated salt is to be given in doses of from one to three teaspoonfuls, dissolved, at the time of taking, in iced water, and the solution drunk during effervescence.

Magnesium Sulphate (MgSO₄.7H₂O).—Magnesium Sulphate—the well-known *Epsom Salt*—is official in the United States Pharmacopœia as *Magnesi Sulphas*, Magnesium Sulphate. It is a widely distributed salt, being an ingredient of sea-water, and of the water of some saline springs, and occurring also native. It is prepared for commerce in a number of ways. Magnesium Sulphate occurs in small, colorless, right-rhombic prisms, or circular needles, slowly efflorescent in dry air, odorless, having a cooling, saline, bitter and disagreeable taste, and a neutral reaction. It dissolves in one and a half parts of cold water and very freely in boiling water. It is insoluble in alcohol.

Magnesium sulphate is a typical saline purge, and, although of very disagreeable taste, is usually well borne by the stomach. In excessive dose, however, it induces nausea and vomiting in addition to profuse purging. In small, repeated doses the salt may prove slightly diuretic, and often in such doses it makes an excellent corrective in ordinary gastric derangement. A full purgative dose for an adult is 30 gm. (℥i.), but if taken, as preferably it should be, immediately upon rising in the morning, on an empty stomach, one-fourth of such amount may be sufficient for a purge. As a corrective, 0.30 gm. (gr. v.) may be given at a dose, repeated a number of times daily. The salt is best given dissolved in ice-cold lemon soda. Magnesium sulphate is by far the most commonly used saline purgative, and hence the non-distinctive phrase, a *dose of salts*, is commonly held to mean a dose of this particular salt. *Bitter purging salt*, and, simply *bitter salt*, are also common names for the sulphate. Epsom salt is an ingredient of the pharmacopœial *compound infusion of senna*.
Edward Curtis.

MAGNESIUM CREOSOTATE, Creosolid, creosote-magnesia, is a mixture of creosote and calcined magnesia which, being free from odor or taste of creosote, is a convenient means for administering this remedy. Dose gm. 0.5 (gr. viij.) three or four times a day.
W. A. Bastedo.

MAGNESIUM ICHTHYOLATE is prepared by mixing 100 parts of recently calcined magnesia with 775 parts of ichthyol and evaporating to dryness. It is used with talc as an antiseptic dusting powder.
W. A. Bastedo.

MAGNESIUM LORETINATES, basic and neutral, are substitutes for iodoform (see *Loretin*). The basic salt, MgI.O.C₃H₃N.SO₃.5H₂O, occurs as sparingly soluble yellow crystals, and the neutral salt, Mg(I.OH.C₃H₃N.SO₃)₂.7H₂O, in readily soluble salmon-colored prisms.
W. A. Bastedo.

MAGNESIUM PHENOL-SULPHONATE, or sulphophenate, occurs in the form of white, almost odorless needles of bitterish taste and alkaline reaction. It is soluble in 2 parts of water and 5 of alcohol, and in dose of 1 to 2 gm. (gr. xv.-xxx.) is recommended as a useful saline aperient similar to magnesium sulphate.
W. A. Bastedo.

MAGNETIC MINERAL SPRING.—Vigo County, Indiana.

POST-OFFICE.—Terre Haute.
This water is procured from an artesian well, 2,000 feet deep, at the foot of Walnut Street, in the city of Terre Haute. The point is accessible by any street-car