

### Plagues and Pestilences.

At a recent meeting of the members of the Statistical Society, London, Mr. Cornelius Walford read a paper on the "Chronology of Plagues and Pestilences, as Affecting Human, Animal, and Vegetable Life." The facts collected by Mr. Walford are interesting, as showing the superstition of the people in all ages of the world's history.

The view that plagues and pestilences are judgments dated from the earliest Pagan times, and students of the classics will remember the plague supposed to have been caused in Attica by the gods as a punishment for the slaughter of a sacred bear; that in Thessaly by Apollo on account of disrespect shown; a plague at Sicyon caused by Apollo and Artemis for the same reason; and the plague in Samaria given in Josephus as the punishment of idolatry. In the Iliad, Homer describes the plague which prostrated the Greek camp from the wrath of Apollo at an insult offered to Chryses, his high priest. A similar plague was inflicted by Apollo at Corina, on account of Hyppolatus killing his prophet. Delphi, we are told, suffered a plague and famine as punishment for the ill treatment of Æsop. In Rome a dreadful plague raged, which the sibylline books proved to have been caused by the incontinence of a vestal virgin, who strangled herself to avoid being buried alive.

Scripture records recount five instances of plagues inflicted by God as direct punishment for discontent and murmurings among His chosen people. Coming to profane history, we learn, A.D. 665, over-population caused a dearth of food in Ireland, which prepared the people for a severe infliction of plague, which had broken out in England the year before. Ruffini tells us that the joy of the English at the victory of Cressy, in 1347, and the surrender of Calais the year after, induced such unbridled excess and debauchery that God, not permitting these disorders to go long unpunished, inflicted the plague, which, after traversing Asia and Europe, raged with such fury in London that 50,000 persons were buried in the churchyard of the Charterhouse alone. The belief in these direct judgments remained down to very modern times.

That earthquakes are the more potent of the terrestrial causes of plagues and pestilences had the support of Scripture authority, notably in the fourteenth chapter of Zechariah and the seventeenth of St. Luke, verse 2. Thucydides mentions a plague, associated with serious earthquakes, preventing the annual invasion of Attica, and the famous Black Death of 1348 was preceded by fearful earthquakes and fiery meteors of portentous aspect. A violent earthquake in Central Germany heralded the third appearance of the sweating sickness and epidemic encephalitis, in 1517, and of that epidemic in Holland at the same time, which physicians now believe to have been diphtheria. The great eruption of Mount Hecla, in 1783, when a river of lava twelve miles wide flowed in six weeks a distance of sixty miles into the sea, drying up twelve rivers and destroying twenty-one villages, was followed by diseases of a most peculiar and inveterate kind.

In the same year there were most destructive earthquakes in Italy and Messina, and terrible pestilences prevailed in Central Europe, due, as is supposed, mainly to the vapors or exhalations. Great destruction of life has been attributed at different times to mephitic vapors not due to earthquakes. In the year 140 B. C., the Roman army in Algeria are said to have fallen victims to mephitic vapors generated by themselves for the destruction of the inhabitants, and in A. D. 168 a plague at Rome, preceded by a still more destructive plague in Asia, was supposed to have had its origin in foul airs from a small box which a Roman soldier had opened at the capture of Seleucia.

Our own annals tell of a marvelous visitation of rain and thunder in 1223, by which the congregation of the church of Barnwell, near Cambridge, were sorely tried. "Such flashes of lightning entered the church that each man thought it had been set on fire; and such a filthy stench arose withal that manie of the company fell sick thereof and hardly escaped death." The plague of 1345-49, which is said to have begun in China, "from the vapors proceeding from a certain fiery body which fell from the atmosphere, or was eructated from the earth," caused awful mortality. In Florence, 100,000 people died; in London, 59,000 are said to have died in a single week; while 100,000 perished in Venice, 90,000 in Lubeck, and 200,000 in Spain.

One of the modern theories ascribes pestilence to cosmic dust composed of iron, nickel, cobalt, and other substances. This receives some support from the Jewish writer Philo, who, in A. D. 92, describes a "loimic" pestilence arising from clouds of dust, which produced severe and intractable ulceration of the skin, both of men and animals. In A. D. 593, during a pestilence in Rome, the air was charged with a mist or cosmic dust which induced violent sneezing, which gave rise to the expression "Dominus tecum" to a sneezer, a practice not yet extinct. A haze or "dry fog" has been frequently noted as accompanying cholera visitations. Such a haze, which was of a pale blue shade, and possessed of peculiar drying properties, and of a marked and indescribable odor, was very prevalent in the year of convulsions just a century ago, and its dispersion in 1783 was attended with violent thunderstorms. It is thought that this haze may be associated with the powerful agents which seem to pervade the air after volcanic and earthquake eruptions, and on scientific grounds it seems clear that some diseases may be occasioned.

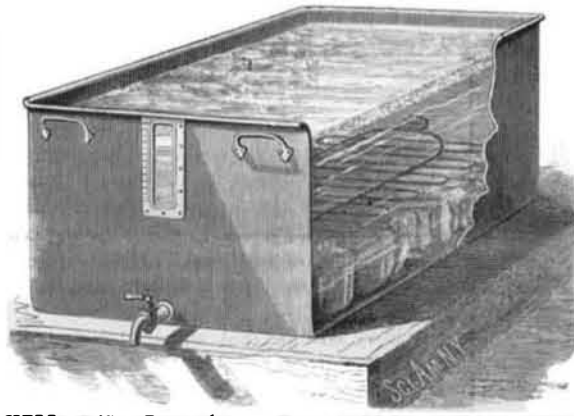
During plagues and pestilences popular superstition has frequently suggested poisoning the waters as the cause. Dif-

ferent sects were thus led to accuse each other, and this and other malpractices, and the mortality arising from disease was swelled by slaughter. At Mentz 12,000 Jews fell victims to the populace on suspicion of having poisoned the wells of the city. In Milan, in 1630, when a severe visitation of plague occurred, there was a popular belief that the disease was propagated by people who anointed the walls of the houses with a poison fatal to all who touched it, and many unfortunates who were suspected lost their lives; while the house of a barber named Mora, who was accused of preparing the poison, was pulled down, and a column, known as the "Column of Infamy," was erected on the site, where it remained until 1775.

Drought, both in ancient and modern times, has been too intimately connected with diseases of unusual severity to leave much doubt of their being in some way connected. Pestilence has been caused not unfrequently by the decaying bodies of locusts and animals perishing during an epizootic visitation, as well as by decaying vegetable substances. Under all the other heads some very curious and interesting facts were collected and stated, and a complete enumeration was given of all the authenticated cases of plagues that have afflicted humanity, and of the legislative means taken for mitigating their effect; the author suggesting, at the conclusion of his paper, that there still remained to be treated the "Periodicity of Plague Visitations," the "Spontaneous Origin of Disease," and "Pestilential Cyclones."—*English Mechanic.*

### IMPROVED METHOD OF RAISING CREAM FROM MILK.

Milk is mainly composed of cream, caseine, sugar, some neutral salts, and water, as is well known. Caseine is coagulated by the application of heat. Cream is the oily or unctuous element, and, like all oleaginous matter, hardens on being cooled. Hence in dairying processes cheese is made by heating the milk, butter by cooling it. It is a well known fact that rapid cooling of milk hastens the formation and increases the quantity of the cream, and the fresher and sweeter the milk, and the quicker and more thoroughly the cream is "raised" or concreted from it, the better in



KELLOGG'S APPARATUS FOR RAISING CREAM FROM MILK.

quantity and quality will be the butter produced, and the more valuable will be the skimmed milk for cheese making or other use.

The engraving shows an apparatus for the rapid refrigeration of milk to facilitate the concretion of cream, and thus increase the quantity and quality from a given bulk of milk. In this apparatus ice is applied to milk in a convenient and effectual manner.

This is accomplished by filling the vat to about one-fourth its depth with clean, pure ice, in as large cakes or pieces and as compactly placed as may be. This bulk of ice will give the requisite proportion of ice to milk—that is, about ten pounds of ice to forty pounds of milk—when the vat or vessel is filled up. The specific gravity of ice being less than that of milk, it will naturally float, and so mingle with and impede the rising and formation of the cream on the surface. For this reason the ice is confined by bars or grating to the bottom of the vat or vessel before filling with milk. The cream, being quickly and thoroughly extracted, rises and forms evenly on the surface, leaving a fresh and sweet residuum of "skim milk."

The cream may be removed in about forty minutes after the setting, and the skim-milk then drawn from the vat, when no material part of the ice will have melted, and the water from the melting ice neither mingles with the cream at all, nor with the skim-milk in quantity to perceptibly affect its value for any purpose.

It is claimed that this process greatly increases the yield of butter, and it permits of taking the milk to the dairy before it becomes sour, and the milk will yield the same amount of cream as though fresh drawn from the cow. The process is said to work equally well in all climates.

This invention has been patented by Mr. Henry W. Kellogg, of Ripon, Wis.

### The Power of Homœopathy.

At the recent meeting of the Medical Society of the State of New York, a spicy discussion took place concerning that section of the code of ethics, adopted last year by the American Medical Association, which allows allopathic or orthodox physicians to hold consultations with homœopathic doctors. There seemed at one time to be a strong disposition on the part of some members of the State Society

to secede from the American Association, unless the latter will repeal or expunge the objectionable rule. It would seem from the proceedings of these learned medicals that homœopathy, mild and harmless as it is upon ordinary sick people in general, has a most extraordinary effect upon the cerebral organs of certain New York doctors. We give a few disconnected abstracts from the speeches:

Dr. H. R. Hopkins of Buffalo, said: To maintain that one may refuse to consult with another because he does not like him is absurd. The practice under the old code may be fairly expressed by putting it in this way: "That no consultation shall be held with regularly licensed physicians who hold eclectic or homœopathic views." The people have created this society, and also eclectic and homœopathic societies. When this society assumes that its members may not meet regularly licensed physicians in consultation, it makes itself ridiculous.

Dr. H. D. Didama, of Syracuse: A consultation is a fraud, where no good can possibly come to the patient, when physicians consent to consult with persons who differ from them as light does from darkness. Those gentlemen who support the new code, will they tell me how any possible good can come to the patient by consulting with a man who believes that an ordinary dose—five grains of quinine—should be diluted in twenty-eight hogsheads of water, of which solution one drop should be given as a dose? Dr. Roosa knows that the homœopath would not give a dose containing any appreciable quantity of medicine. We claim that we give something, and they give practically nothing.

Dr. Thomas F. Rochester, of Buffalo: I rise with the full consciousness of the importance of this question. The American Association has been called a junketing association, a Rip Van Winkle association. What is this word "progress"? It is a good deal like the Irishman's definition of a retrograde movement—"an advance backward." What are we to gain by the first clause of this new code? It says we may go into consultation with homœopaths or others. Thus we have started down from our plane to meet them; they don't come up to meet us. What do we expect when we do go to them? We meet, we talk, we don't agree in therapeutics or diagnosis, but the people are satisfied. We cannot do this without degrading ourselves, and I cannot see any possible advantage to result. We cannot reform homœopathy. It is impossible for anything of this kind to take place.

Dr. C. R. Agnew, of New York: This is a very serious moment in the history of this society. These gentlemen, amiable as they may be, are endeavoring to lead this society not only to the edge of an abyss, but down into an abyss. Adopt the resolutions, repeal the present code and re-enact the old one, and you put this society in opposition to the policy of the State, and you attempt to coerce the members of this society into an attitude in which no person who is capable of construing the laws will agree with them.

Dr. Hutchison: I am ready to step into the abyss, and consider it the proudest moment of my life. I desire to read a petition which has been circulated in the city of New York, and which I have been requested to present here. The petition has only been circulated for a short time, or there would have been more names on it, but it contains already one hundred and two names; among them are the names of such men as Alonzo Clark, Austin Flint, and others of like character. The petition opposes the new code. I desire also to read a letter from Dr. Sayre. (The letter was explanatory of the circumstances of the consultation with the homœopath.)

Dr. William P. Seymour, of Troy: I think it a damning shame that a specialist should be the only man to stand up here and defend the practice of ages. It seems as if no one could get the floor here unless he was in favor of the new code. I have a telegram here from Dr. Lewis Sayre. I do not mean to mince matters. I agree with the statement that we are on the verge of an abyss, but I believe that, if anybody goes into it, it will be those who flaunt the flag of philanthropy. They have talked law till I am sick. They have talked law as if we were made for law. Good God! the laws were made for us.

The telegram from Dr. Sayre being called for, he read a dispatch stating that Dr. Sayre was confined to his bed; also a dispatch from Dr. Sayre to the effect that he had met in consultation a Dr. Baldwin, but there was nothing to indicate that Dr. Baldwin was a homœopath, and he did not know he was one till afterward.

After further talk in the same general style, the discussion of the innocent globule of homœopathic milk sugar contained in the code was postponed for one year.

### A Remarkable Vein of Natural Gas.

For several months drilling has been in progress for natural gas at Hills Station, on the West Pennsylvania Road, some nineteen miles distant from Pittsburg, Pa., on the line of Allegheny River. A plate glass manufactory is under construction at that point, under the management of J. B. Ford, formerly of the New Albany Works at Indiana. Between \$2,000,000 and \$3,000,000 will be invested in the plant. February 13, when the drillers had reached a depth of 1,170 feet, a remarkable vein of gas was struck. The vapor immediately ignited, burning down the shanty and derrick. The drillers barely escaped with their lives. The strike caused great excitement, and the parties interested in the works are delighted, as it will, they think, make them independent with respect to fuel for melting and annealing purposes.