At the recent meeting of the "French Societie d'Encouragement pour l'Industrie Nationale, ` M. G. Meyer, of Paris, submitted specimens of paper specially manufactured to resist fire. The papers and documents shewn had been for four hours in a retort in a pottery furnace. Those present were unable to distinguish, either by appearance or texture, the papers so treated, from others which had not undergone the ordeal of fire.

M. Dumas recommends water saturated with alum for extinguishing fires, its value being supposed to be due to the coating it gives to objects wet with it, which prevents contact with the oxygen air, and thus diminishes the rapidity of the combustion. The Minister of the Interior has recommended that the firemen of the French towns be supplied with facilities to use such solutions of alum. Professor Mattieu has made similar experiments with the same results, and gives it as his opinion that it may lead to a revelotion in artificial light. He thinks that we need not despair of solving the chemical problem of transforming mutton suct, or palm oil, or vaseline, into glow worm or notiluca fat; and that these will supply the artificial light of the future.

Dr. Carlos Finlay, of Havana, maintains that yellow fever may be communicated from one individual to another by the agency of mosquitoes. He has seen under the microscope spores and filaments of a particular nature on the sting of one of these insects that had just bitten a patient suffering from yellow fever and thinks that the germs may undoubtedly be introduced into a healthy individual by the bite of a mosquito. He recalls the fact that these insects were remarkably numerous in Philadelphia at the time of the yellow  $\mathrm{He}_{\perp}$ fever epidemic of 1767, and states also that the same conditions of temperature are necessary for the life of the mosquito as for the existence and spread of yellow fever.

M. Paul Bert, the eminent French biologist, has been investigating the origin of sugar in milk. Two theories exist for explaining this phenomenon, one of which supposes that it is formed in the gland itself from lactogenic or milk forming matter; the other supposes that it comes from the blood, and is merely stored in the breasts of animals. M. Bert has experimented with cows and she goats, and found beyond a doubt that sugar of milk is introduced by excretion in the I breasts from sugar formed in excess by the animal. The sugar is apparently first formed in the liver, but whether it appears in the form of lactose, or glycose, afterwards transformed into lactose in the breasts, is vet a most point which M. Bert has not investigated.

Attention has been directed of late to the experiments made by M. Panchon on the limits of hearing, the result being communicated to the French Academy of Sciences. The notes were produced by a powerful siren of the kind invented by Cagniard-Hatour, and actuated by steam. It seems that the highest audible notes produced in this way had 72,000 vibrations per minute. M. Panchon has also vibrated metal stems fixed at one end and rubbed with cloth powdered with colophane. In diminishing the length of the stem the sharpness of the note is increased. Curiously enough, he finds that the length of stem giving the limiting sound is independent of its diameter; and for steel, copper, and silver, the lengths are in ratio to the respective velocities of sound in these metals -that is, as 1.000 for copper, 1.002 for steel, and 0.995 for silver. Colophane appears to be the best rubbing substance.

At Ekhmeem, a large provincial town of Upper Egypt, situate about half way between Assiout and Thebes, Professor Maspero, returning from his annual trip of inspection up the Nile, has just found a hitherto undiscovered and unplundered necropolis of immense extent. As far as has been yet ascertained, the necropolis dates from the Ptolemaic period; but as the work of exploration proceeds it will probably be found that it contains more ancient quarters. The riches of this new burial field would meanwhile seem to be almost inexhaustible. Five great tombs or catacombs already opened have yielded 120 minimies, and within the short space of three hours Professor Maspero verified the | an unbroken line running back to Solomon.

sites of over 100 more similar catacombs, all absolutely intact. The necropolis of Ekhmeem, at a rough estimate, cannot contain fewer than five or six thousand embalmed dead. Of these perhaps not more than 20 per cent, will turn out to be of archæological or historical value; but the harvest of papyri, jewels, and other funeral treasures cannot fail in any case to be of unprecedented extent. Ekhmeem, is the ancient Khemnis-The Panopolis of the Greeks. Its architectural remains are insignificant.

## Passing Notes.

In a lecture at Kensington, says a despatch, Max Muller declared that the soul of Buddhism is charity, that indeed it is the true religion of humanity.

At a yearly meeting of Friends in Philadelphia, it was ascertained through epistles that "in no instance was there a report of any Friend being engaged in the manufacture or sale of intoxicants.

The fact that 2,000,000 human bodies have been buried within the limits of the London postal circle during the last twenty-five years, is being used with decided effect by the advocates of cremation in the British capital.

The London Spectator says: "Murder is a cause of death in England to 237 per 10,000,000; in Belgium, to 240; in France, to 265; in Scandanavia, to 266; in Germany, to 279; in Ireland, (1879,) to 294; in Austria, to 310; in Russia, to 323; in Italy, to 504; in Spain, to 533, and in the United States to 820."

Says Mr. Bradlaugh, respecting the mobbing he received when attempting to lecture at Bridgewater. "The riot was arranged by the local licensed victuallers and the clergy and gentry, and at the bar of the very hotel in which I was staying, the brother of one beneficed clergyman of the district, was prominent in paying for liquor for those who were hired to assault

The following is another instance of the corrupting influence of Christianity:— "Yes, the women have deserted me," said murderer Rugg to a Mail and Express reporter the other morning. "I get no more flowers or sympathy, but I manage to sleep well, eat well, and feel well. Yes, religion is a great thing. I'm going to God when I die!"—New York Mail and Express.

In 1868, George Eliot wrote a friend in regard to herself and Mr. Lewes: "We love too much our associated studies and solitude to let the world have more than one day a week. Society here is, moreover, what it everywhere is,—empty. The English world is extremely like what it was when you left, conversation more or less trivial and little sincere, the literature of the moment scarcely better, and politics worse than one or the other.'

The Mahdi is a radical total abstinence man, even to coffee and tobacco, which he wont even allow in his camp. In fact, he lately gave a refugee one hundred and fifty lashes for smoking a cigaret. But he makes up for this by having thirty nine-wives, and keeps within the letter of the Mohammedan law, which allows only four wives at a time, by an ingenious system of temporary divorce, by which he always has thirty-five wives in waiting,—Boston Index.

The Crown Prince of Germany recently gave an address before the Royal York Lodge in Berlin, which has been the subject of much comment among his brethren of the Order. He said that Freemasons should be more progressive, and that instead of clinging tenaciously to old traditions, whose value consists solely in their antiquity, they should distinguish themselves by being in the front rank of seekers after new andliving truths. This advice is worthy of an enlightened prince, but will it be followed? It is quite melancholy to observe the cravings of Masons for historical facts connected with their Order, which do not exist-to find