time to time with spirits of turpentine, all painted surfaces were repainted, and Dr. Marfan recommended that the floor should be swept in the evening after the departure of the employees, and that the windows should be left open all night.

Dr. Vallin recommends in place of these measures a mixture of equal parts of coal-tar and spirits of turpentine, or of paraffine dissolved in warm petroleum, and, in place of the sweeping, the removal of the dust by sponges, or cloths moistened with an antiseptic solution.

Tissue Metabolism in Cancer.

Dr. F. Müller has made some careful comparative observations upon the urine in cases of cancer and other wasting diseases, and in simple starvation. He finds, according to the London *Lancet*, that in the cancerous the excretion of nitrogen far exceeds the amount ingested, and infers that this excess must in consequence be derived from the disintegration of the albuminoids of the body. However, in two out of seven cases this loss was not greater than occurred in other individuals similarly insufficiently nourished. The chlorides were, on the other hand, notably diminished,—a fact, he thinks, pointing to the source of the excreted nitrogen; viz., from the organ albumen, and not from the circulating albumen. Obviously, however, many diseases share, with carcinoma, in this disintegrating process, as Müller showed to be the case in chronic febrile affections, especially severe forms of malaria, in leukæmia, and pernicious anæmia. Previous observers do not coincide in their statements on this head as regards leukæmia. Voit and Pettenkofer found no marked evidence of increased metabolism in this affection, and Fleischer and Penzoldt concurred in this so far as regards mild cases. But in severe cases the last-named find the urea to be increased both absolutely and relatively. Sticker and Klemperer arrived at the same conclusion. Respecting pernicious anæmia, there is a concurrence of testimony in support of increased nitrogenous excretion. Reverting to cancer, this evidence, Müller thinks, goes to prove that malignant disease excites the formation of metabolic products which are poisonous to the organism. He points out that cachexia develops in the cases of malignant growths, no matter how limited, and without their involving any important organ; whereas a non-malignant tumor may attain great dimensions without affecting the excretion of urea. At the same time no such poison or ferment destructive of albumen can be isolated from cancerous tumors, although the fact pointed out by Feltz, that the urine of the cancerous is more toxic to animals than that of healthy individuals, is, with other facts, highly suggestive of that view.

Kola-Nut for Seasickness.

Dr. C. W. Hamilton of the British Navy writes to the *British Medical Journal* of May 10, 1890, that he has found the seed of the kola (*Sterculia acuminata*) a most successful remedy in seasickness. From half to one dram of the seed was slowly chewed, and in about half an hour the distressing symptoms of the malady gradually disappeared. The writer had never found any drug to act as well as this, and believes that further trials will prove it to be an effectual remedy for seasickness.

ELECTRICAL SCIENCE.

Electric Welding and Ice-Machines.

THE ice-famine is proving a bonanza for the Thomson Electric Welding Company, says the *Boston Advertiser*. There is a great demand at present for pipe-welding machines, with which to make the long coils of pipe for artificial-ice machines, for brewery coils, for sugar-refinery and general refrigerating purposes. The pipes originally come in lengths of from eighteen to twenty feet. The coils are frequently six hundred to seven hundred feet long. By old systems the pipe is welded together by a slow and laborious process, requiring fifteen minutes for each weld, two blacksmiths and a dozen helpers, and a large space, each pipe being lifted from the forge to the anvil, and a mandril inserted. There is often a serious loss of ammonia as a consequence of imperfect welding. By the electric process the welds can be made so homogeneous that there is no chance for ammonia to escape. The length of time required is two minutes for each weld, and all the help required is a man and a boy. The cost of the old process is fifteen cents each; by the new, two cents. As the coil is bent after each weld, the work can be done in a very small space. The managers of the Welding Company consider this, next to shell-welding, the most important industry which has sprung up as a result of the welding invention.

Atmospheric Electricity in the Tropics.

In order to investigate the relations of atmospheric electricity to the moisture of the air within certain limits, Herr F. Exner has made observations of the fall of atmospheric potential in countries with high relative moisture, particularly in the Indian Ocean between Aden and Bombay, in Bombay itself, and in Ceylon, both on the coast and in the interior. According to *The Electrical Engineer* of July 9, the measurements were made with transportable apparatus invented by Herr Exner. All the values of the fall of potential were positive. Near the coast the finely divided spray arising from the breaking of the waves exerted an increased action on the fall of potential. On the other hand, measurements made in Cairo and the vicinity showed that there the dust of the air exerted a lessening influence on the fall of potential, which, with a strong wind, was so marked that the sign of the fall of potential became negative.

Storms and Electric Wires.

It has for some years been the practice at the Berlin post-office, says the London *Electrical Review*, for the employees to make a note of storms and magnetic disturbances, direction of storms, length, etc.; and the result has demonstrated that underground wires, without being entirely free from the influence of magnetic storms, are much less liable to disturbance than overhead ones, and, on the other hand, that accidents from lightning are much less serious in those towns where the overhead system is in vogue.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The editor will be glad to publish any queries consonant with the character of the journal.

On request, twenty copies of the number containing his communication will be furnished free to any correspondent.

A Stony Meteorite from Washington County, Kan.

HAVING seen press despatches from Washington, the county seat of Washington County, Kan., announcing the fall of an aerolite near that town on Wednesday, June 25, I visited that county at the earliest possible opportunity, for the purpose of ascertaining the facts. I found them to be as follows, and verified by a multitude of witnesses: At about ten minutes before one o'clock on the afternoon of June 25, the sky being free from clouds, a strange noise was heard by thousands of people residing in the counties of Washington, Republic, Cloud, Clay, Riley, Pottawatomie, and Marshall, in Kansas, and in the counties of Thayer, Jefferson, and Gage, in Nebraska. The same noise was heard by hundreds of people in counties more distant than those mentioned.

The descriptions given me of the character of this strange sound were exceedingly various. Mr. E. F. Woodruff of Clifton, fully twenty-five miles from the place where the meteor struck the ground, stated to me, that while standing on the front porch of his hotel after dinner, a few minutes before one o'clock, his attention was attracted by a rumbling sound like thunder, which began gently, and increased in power to a maximum, rising even above the din of a Missouri Pacific Railroad train which passed within a few rods during the continuance of the phenomenon. The sound appeared to him to come from the zenith, and to continue for two or three minutes, gradually fading away, and being at no time of an explosive character.

Mr. John Yates of Grant Township, more than fifty miles from Washington, on the contrary, heard the sound of the flying me-