

sion be subject to these periodical insults from Whig Boards of Admiralty; and equally certain is it that a stoppage of the supply would oblige the War-office and Admiralty to redress present grievances, and to pay more respect in future to her Majesty's Warrants.

At my time of life and period of service, the grievances of which I speak fall lightly upon me. But in the interest of those who cannot appreciate them, and who might be entrapped, as I was, to enter an unprofitable service, and live as I have lived to repent it, pray let the warning voice be heard in your columns. I am, Sir, your obedient servant,

November, 1861.

A NAVAL SURGEON.

### ALBUMINOUS URINE.

To the Editor of THE LANCET.

SIR,—In examining albuminous urine I have observed a source of fallacy in the nitric acid and heat test which is new to me and very interesting, but which I have never seen noticed in works upon the subject. It is the prevention of coagulation by heat through the agency of nitric acid.

It is laid down as an axiom that urine clouded by heat indicates either albumen or phosphates. If the former, nitric acid increases the turbidity; if the latter, it clears it. By reversing the operation in urine highly charged with albumen, adding to a drachm of urine one drop of nitric acid, a precipitate falls, which after shaking is redissolved by heat. The solution on cooling forms a solid jelly, which I presume is gelatine. This, however, is not redissolved by heat. If excess of nitric acid is applied so as to precipitate all the albumen, the heat does not dissolve it.

The error of supposing urine containing albumen to be non-albuminous might be brought about thus. Supposing a test-tube, in which nitric acid had been largely applied, to be simply put aside, after emptying the contents, without washing, and taken for the next experiment by mistake for a clean tube, the urine on boiling will become clear, and thus deceive the operator into the impression that he was dealing with urine free from albumen.

I am, Sir, your obedient servant,

Lancaster, November, 1861.

METCALFE JOHNSON, M.R.C.S.

### PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

FEW, possibly none, of the more arduous callings in life can be exercised without a measure of wear and tear in the human machine. Civilization, by coercing into her service the less destructible elements of creation, stone, iron, and the like, has directly testified her knowledge of how limited are the capacities of the human organism, and her distrust of its unaided powers for the satisfaction of her requirements. In no way can the destructibility of the working material with which we men are provided be better seen than by a consideration of the special diseases or casualties which the exercise of particular professions entails upon their adepts. The statesman, clergyman, and lawyer have their special sore-throat, the doctor his dissecting-wound, the knifegrinder his phthisis, the painter his colic, the lucifer-match maker his necrosis, the chimney-sweeper his cancer; and so on through a long chapter of accidents, ending only, it would appear, with the last item on the catalogue of professions. In presence of this almost daily increase of morbid causes, it behoves medical science, as the sentinel of civilization, to be more than ever on the alert, and, crying "Qui vive!" to check the hurtful progress of such newcomers. Such is the object of a paper read at the Academy of Medicine last Tuesday by M. Delpech, one of the candidates for the vacant chair in the section of Medical Jurisprudence and Public Hygiene. Some few years back, this writer, in a communication to the Academy, first drew notice to the baneful effects produced by the sulphuret of carbon upon the workmen employed in the preparation of vulcanized indiarubber. The process termed "vulcanizing" is effected by the exposure of caoutchouc to the action of a mixture of sulphuret of carbon with chloride or bromide of sulphur; and, according to M. Delpech, the respiration of air charged with the vapour given off during the operation produces, in a large proportion of the

workmen so engaged, symptoms not unlike those resulting from the inhalation of ether, chloroform, or other anæsthetic agent, with the difference that in the former case the effects are more gradually developed. The particular branch of the indiarubber manufacture whence the author has gleaned his most prominent facts is that in which the caoutchouc is blown into bags or bladders for medical and other purposes; and here he has divided the symptoms of intoxication (to use the word in its classical sense) into two stages. In the first are ranged headache, giddiness, cutaneous hyperæsthesia, with feelings of creeping or pricking, and muscular pains. A certain degree of excitement and agitation also is not uncommon, together with a tendency to laugh or cry without reason; and with these half-hysterical symptoms may coexist, sleeplessness, nightmare, and great irritability of temper, sometimes ending in confirmed mental alienation as a clinax. In other cases the stimulus has affected the generative functions, as evinced by an increase of the venereal appetite; or the muscular system, in the way of spasm or stiffness; or, again, the digestive or respiratory organs, by the production of bulimy, nausea, cough, and oppression; and, lastly, the heart and circulation, in the way of fever and palpitation. In the second stage, the poison would seem almost exclusively to have impaired the functions of the nervous system, as exhibited by decline of the intellectual powers, melancholy, indifference, loss of memory, defective vision, deafness, and insensibility of the skin, together with loss of sexual power, atrophy of the seminal glands, general muscular debility, going on to paraplegia, wasting, and cachexia. By means of experiments on animals, M. Delpech has ascertained that rabbits, for example, although easily affected by the vapours of the vulcanizing mixture or by those of the sulphuret of carbon alone, passed several days with impunity in an atmosphere charged with chloride of sulphur; and he therefore argues, with much apparent fairness, that the former ingredient alone is responsible for the baneful effects resulting from the process. By way of practical deduction, he infers that if the work-people could be so placed, when manipulating these poisonous materials, that a glass screen should intervene between them and the caoutchouc under preparation, their arms being passed through apertures properly stuffed in order to prevent the entry of vapour, much benefit would accrue, in a hygienic point of view, to the *employés* in this branch of trade.

M. Mathieu exhibited at the same meeting the model of a new whalebone bougie for the dilatation of the urethra. This instrument, due to Dr. Demarquay, of the Maison Municipale, terminates in a spiral extremity, something like the ramrod of a gun (before the invention of breech-loaders). Singular approximation this of two extremes!—the use of the corkscrew as a corrective of its abuse—almost *similia similibus*.

In a paper on Contractile Tissues, read by M. Rouget at the Academy of Sciences a few days back, when speaking of the properties of the fibrillæ the following passage occurs:—"The fibrillæ, the sole essential elements of contractile tissues, are characterized by their resistance to the prolonged action of weak acids. They refract light powerfully, and with polarized light give rise to the phenomenon of double refraction. They are especially characterized by their granular aspect—an appearance due in all probability to very delicate wavings of their surface. These wavy appearances are inseparable from the constitution of the muscular element, and exist under all circumstances. The transverse striæ of striped muscle are also due to permanent wavings of the bundles of fibrillæ. In a work published in the 'Memoirs of the Academy of Vienna,' M. Edward Brücke remarked that the muscular bundles, when viewed by transmitted coloured polarized light, presented bands in which the general colour was modified, alternating with other bands participating in the general tone, the one and the other variety exactly coinciding with the bright and dark transverse stripes. Hence he inferred that the muscular bundles were formed by superposed discs of alternating quality, the one endowed with, the other being without, the double refractive property. My own observations on the structure of the contractile element being in direct opposition to this opinion, I have been led to investigate the subject very carefully, and I now believe that the muscular substance is not of itself possessed of the double refractive power, and that the phenomena referred to by M. Brücke result simply from the form of the surfaces, and of the anatomical elements of these tissues."

The Paris medical journals announce with some pride that Sir Charles Locock had made a donation of 100 francs to the funds of the General Medical Association of France.

As some encouragement to those about to start for the coast