disease and better prospect of recovery. The result is, that the sick list has been heavier by about 25 per cent., but that acute disease is comparatively rare and seldom fatal, and the downward progress of incurable maladies has been much retarded. The immense majority of the cases (970 per 1,000) terminate in recovery and return to duty. Those who, after some months' treatment, are found to be still incapacitated are superannuated.

The mortality from disease has ranged from five to eighteen *per annum*, and shows for the twenty-eight years an annual mean death-rate of 11.5 per 1,000. Deaths from accident have averaged annually 1.3 1,000. Deaths from all causes have in the period amounted to 12.7 per 1,000.

Retirements from the service by reason of physical or mental incapacity have ranged from 2 to 20 *per annum*, yielding in the twenty-eight years a mean rate of 8 per 1,000 annually superannuated. Combined with deaths, this will give a ratio of 21 per 1,000 for departure from the service through disease and accident: a very moderate proportion when compared with the military and naval services, where, by the mean of ten years' returns of the forces on the home stations, the combined rate was in the Army 43 per 1,000, and in the Royal Navy 37 per 1,000.

TABLE I.—Comparative View of the Annual Numerical Ratio of Disease and Injury in the Army, Navy, and Customs Force.

	Mean daily No. per 1000.	Admissions to Sick List per 1000.	Mean Duration of each Case (Days).	Time lost per Man (Days).	Deaths per 1000.	Invaliding per 1000.	Death and Invaliding per 1000.
Army in the United Kingdom (average of 10 years).....	48	941	18	17	9.5	34	43.5
Navy on the Home Station (average of 10 years).....	41	944	17	15	9.1	28	37.1
Customs Force, Port of London (average of 28 years, 1847-74.)	29	700	15.5	11	12.7	8	20.7

In all these services, it is impossible to dissociate mortality and invaliding, seeing that many of the cases invalided for phthisis, etc., terminate in no long time in death; and, in the military service, such cases are discharged at a comparatively early period. In the Customs force it is different, persons afflicted with chronic diseases often being able to continue at some light duty for many months, with occasional absences in severe weather, and so to defer death or superannuation for a considerable time, in like manner to the bulk of the civil population similarly circumstanced. The ratio of mortality has been tolerably uniform, but that of superannuation has been greatly diminished of late years, more especially for the necessarily fatal diseases. The great majority of those superannuated for rheumatism, insanity, etc., survive for many years afterwards. The combined mortality and superannuation rate for the years preceding 1862 was 24 per 1,000; since that date, it has fallen to 17 per 1,000. Superannuations over the age of 60 for senile debility, etc., do not require medical certificate, and are dealt with in the ordinary way, the officers retiring on a pension proportioned, as in other cases, to their length of service.

[To be continued.]

LARGE VENO-CUTANEOUS NÆVUS TREATED SUCCESSFULLY BY REPEATED INJECTIONS WITH CARBOLIC ACID.

By S. MESSENGER BRADLEY, F.R.C.S.,
Surgeon to the Manchester Royal Infirmary.

A FEMALE infant, about eight months old, was brought to the out-patient rooms of the Manchester Infirmary last November, with a large and prominent nœvus situated above and extending into the helix of the left ear. The tumour, which involved the cutaneous capillaries as well as the veins beneath, measured two inches and a half by one inch and a half, and was raised half an inch above the level of the surrounding skin. I resolved to treat the case as Lister advises, by the injection of carbolic acid; but first, to prevent any risk of embolism, I transfixed the base of the tumour with two long hair-lip pins at right angles to each other, and strangled the entire mass with a ligature tied tightly beneath the pins. I then injected five minims of pure carbolic acid, dispensing it as evenly as possible in minims doses, here and there over the whole tumour. The ligature was cut, and the

needles removed in ten minutes. Little if any change was apparent three days later, when I repeated the process. After a further lapse of four days, no improvement being perceptible, I ligatured the nœvus by means of a Fergusson's knot, and admitted the child into the hospital; its cries, however, were so piteous and continuous, that the house surgeon was compelled to remove the ligature in about six hours, and I do not think that its introduction contributed in any material degree to the successful issue of the case. The following week I again resorted to the injection, and repeated it at intervals of four and five days; but it was not until three weeks had elapsed, and the injections had been employed half-a-dozen times, that any diminution was perceptible. At this period, however, a decrease became manifest, and this decrease steadily progressed, *although no further injection was used*. From week to week until now (March 14th) the tumour is no longer at all raised above the level of the surrounding skin, and the integument has almost entirely regained its natural character and colour.

The point of chief interest here appears to be the gradual but very continuous action of the acid. Probably success would have been equally attained by fewer injections; and, in the next case of the kind, I should allow an interval of a week or ten days between the operations. But the really important fact seems to be, that we can confidently count on success by this safe and little unpleasant method; and when we reflect upon this fact, and at the same time call to mind the potency of electrolysis in the treatment of aneurism, where the long-continued result following the operation closely resembles the action of injections in nœvus, we are led to conclude that the entire chapter of the treatment of vascular tumour will have to be rewritten.

The remarkable way in which the stained skin recovered its normal colour in this case induced me to ponder upon the possibility of removing simple capillary nœvi, or "mother's marks", which sometimes cover large portions of the body; and, at last it occurred to me, that the desired end might be achieved by "tattooing" such marks with carbolic acid. On this idea I acted, and tattooed the first case that presented itself; the result answered my utmost expectations, for, in about three weeks, the port-wine stains quite disappeared, its place being taken by a tincture of natural colour. It is true that the nœvus in this case did not exceed half-a-crown in diameter, and, up to the present time, I have had no opportunity of testing the efficacy of this plan upon large surfaces; but this I shall certainly do the first chance that offers, and will, if permitted, communicate the result to the BRITISH MEDICAL JOURNAL.

I may add, that I used an ordinary subcutaneous syringe for the tattooing, first removing the piston and withdrawing my finger from the top each time I punctured the skin, so as to permit a small drop of the acid to escape.

I am, however, having a little instrument especially made which I think will be more convenient; it consists of a hollow tube of the size of a quill-pen, with a perforated top, and terminating in a somewhat similar fashion to the teeth of certain poisonous snakes, a small groove, down which the fluid runs, opening immediately above the lancet-shaped point of the instrument.

CASES ILLUSTRATING THE SIGNIFICANCE OF VAGINAL EXAMINATION IN OBSTETRIC PRACTICE.

By A. E. AUST LAWRENCE, M.D.,
Physician-Accoucheur to the Bristol General Hospital.

THE following paper is an abstract of one read before the Bristol Medical and Chirurgical Society on October 27th, 1875; and it is intended to show that there are a large number of cases, the true nature of which would be overlooked unless a vaginal examination were instituted.

In the first set of cases detailed, the symptoms pointed to some urinary trouble, either (1) difficulty in passing urine, (2) constant desires to pass urine, or (3) scalding.

The difficulty in passing urine was found to be due in three cases to retroflexion, and in two cases to antelexion, of the uterus; and, upon replacing that organ and maintaining it in its proper position, the trouble entirely ceased.

The symptom of constant desires to pass urine was found associated with ulceration of os and cervix uteri in six cases, with hemorrhoids in two cases, and with polypi attached just inside the os uteri in three cases. The symptom entirely disappeared on the removal of the causes specified above.

The symptom of scalding on passing urine was found to be due in