former state of disease the hyperæmia would be active, and probably more arterial, here congestive and venous, as the nature of the evacuated blood demonstrates.

As in the pure cases of dysentery, the overcharged portal circulation finds relief by the direct effusion of its contents, and that taking place at a limited and specified extent of the intestinal canal, so engorgement of the liver and vessels of the upper primæ viæ would occur, less than where this direct uncomplicated effusion did not take place, as in the intermediate cases of Privulf, Heathfield, and Mrs. W. In these the congestion of the portal vessels seemed more general, as there was evidently a tendency to disorder of the upper primæ as well as the lower bowels. The implication of the former being further shown by the earlier and deeper white coating imparted to the tongue, irrespective of the symptoms. The tongue, in this pure dysentery, does not seem to become affected till later in the disease, continuing tolerably clean at the commencement, and then results from the effects of local inflammation taking place in the colon, and the subsequent disorder of the whole primæ viæ. This condition of the tongue in the former cases may be conjectured to result from an arrest of the shedding and reproduction of the epithelial lining of its mucous membrane, an event common to it, and that of the stomach, &c. The old epithelium remains attached, none being fresh formed underneath, which would also occur amongst the numerous mucous glands of similar localities, hence checked secretion and congestive states of the capillaries of the mucous membranes are coincident. The removal of such a state of matters would be the restoration of secretion and of the current of blood to a healthy activity.

ON SAVINE.

By EDWARD COPEMAN, M.D.

PHYSICIAN TO THE NORWICH HOSPITAL.

Read at the August meeting of the Norwich Pathological Society.

THE late trial of Mr. Pascoe, a member of the medical profession, for the crime of procuring abortion, excited, as you all know, considerable interest, and, for a time, no little sympathy, on the part of his professional brethren. It has been since but too surely proved that, whatever might at first have been the opinion as to the justice of the sentence, his crime was of a deep dye, and deserved the punishment awarded. But the medical evidence on which he seemed to have been condemned is still open to criticism, and it is with the belief that practical good may result from a consideration of the principal point involved in it,—namely, the propriety, or otherwise, of employing savine as a legitimate medicinal agent, that I now venture to occupy a few minutes of your time with the subject. I do not remember the exact statements made at the trial by the medical witness; but the purport of his evidence was to impress upon the Jury that savine was now never given by medical practitioners for truly

medical purposes; that it was a dangerous medicine; and that, when used, it was in all probability employed with some sinister intent. It, therefore, becomes a proper medico-legal question whether or not savine can and ought to be employed as a medical agent; for the evidence I have referred to was listened to by the Judge, and probably believed by most of those who heard it; and it is important that no wrong impression on the matter should rest on the minds of Judges and Juries in future investigations of the kind.

Savine is an evergreen shrub, belonging to the natural family *conifera*; and its active qualities appear to reside chiefly in an essential oil of much the same constitution as oil of turpentine. All authorities represent it as a drug possessing considerable power upon the uterine organs; but some describe it as an exceedingly useful and efficient emmenagogue, whilst others speak of it as a dangerous and poisonous medicine. "Savine and its essential oil are emmenagogues; the fresh plant is too frequently employed by the peasantry as an abortifacient, but cannot be employed for this purpose without seriously endangering the life of the mother." (Phillip's Translation, Pharm. Lond., 1851.)—"It is, perhaps, the most powerful uterine stimulant of the materia medica, and is occasionally administered in amenorrhœa, though always requiring the utmost caution, lest it induce inflammatory action." (Brande's Manual of Pharmacy.)—"Savine is a powerful stimulant to the uterine organs, and is employed as an emmenagogue with much benefit in amenorrhœa and chlorosis depending on torpor or deficient action of the uterine system. In consequence, however, of its poisonous properties it should be used with caution; its employment is contraindicated where there is the least tendency to irritation or inflammation of the uterus or any of the pelvic viscera." (Neligan on Medicines.)—Nevin and Pereira recommend it as the most effective of all emmenagogues. I will not, however, occupy your time by further quotations, but proceed to the relation of my own recent experience of the drug.

CASE I.

Amelia Woods, about 18 years of age, was admitted as an out-patient at the hospital on the 4th of October, 1851, for chlorosis and amenorrhœa; of a pallid unhealthy complexion, weak circulation, and inclined to be fat. I ordered her a course of steel; but as her attendance was irregular, and she seemed to derive no benefit from the treatment, I admitted her into the house on the 13th of December, and gave her for a time steel and aloetic medicines. These failing, on the 20th of January, 1852, I ordered a mixture composed of Ol. Sabinæ, gttss. iv.; Mucil. Acac., oz. j.; Mist. Camph., oz. iij.; a fourth part twice a day. On the 24th six drops of the oil were put into the mixture; on the 25th, eight; and on the 30th, ten; which dose—namely, five drops daily—she continued to take until the 4th of February, on which day menstruation commenced and lasted four days, in natural quantity. No uncomfortable effect from the medicine was ever com-

plained of. She was discharged *cured*, and has remained well up to the present time.

CASE II.

Ann Ragg, a stout, plethoric-looking woman, of, I believe, 21 years of age, who had never menstruated but once, was admitted by my colleague, Mr. Norgate, March 20, 1852, for an ulcer on the leg of some standing. After a month's treatment the ulcer showed but little disposition to heal; and under the impression that it depended upon disorder of the general health, Mr. Norgate transferred the case to me.

On the 26th of April, after having tried steel and aloetic purgatives ineffectually, I prescribed Ol. Sabinæ, gtts. viij; Mucil. Acac., oz. j.; Mist. Camph., oz. iij. M. Capt. quartam part., bis die. On the 3rd of May twelve drops were put into the mixture; on the 8th, sixteen; 10th, twenty; 15th, twenty-four; 19th, twenty-eight; 20th, thirty; 24th, thirty-four; 29th, forty; viz., ten drops twice a day. I began to despair of its doing any good, and thought of discharging her; but as her health had in no way suffered, and her leg was somewhat improved, I ordered, on the 1st of June, forty-four drops; on the 7th, forty-eight; on the 10th, fifty-two; viz., thirteen drops twice a day; and on the 11th the nurse told me the catamenia had appeared that morning. She was unwell, in a natural way, as to duration and quantity, and was soon after discharged cured, the ulcer being, I believe, also healed. This woman had the appearance of full health, cheeks full of colour, and body generally in good plight; but she suffered not the slightest ill effect, or indeed any appreciable effect, save that of the occurrence of menstruation, from the savine even in doses much larger than were stated at Mr. Pascoe's trial to be dangerous to life.

CASE III.

Sarah Ann Fisher, aged 15 years. Admitted an out-patient, March 20, 1852, complaining of palpitation and general weakness, with anæmic *bruit*, and amenorrhœa. General appearance that of anæmia, with inclination to fatness, with languid circulation and costive bowels. Ordered aperients and compound steel pills.

April 14th.—No better. Capt. Mist. Ferri. c. Omitt. Pil.

28th.—Has complained of headache since taking the mixture. Mist. Ammon. Gent. Omitt. Mist. Ferri.

May 5th.—Still no improvement, and I advised her to get an in-door recommendation, giving her, meanwhile, Decoct. Cinch. instead of other medicine.

22nd.—She was this day received into the hospital, and menstruation took place a day or two afterwards. I gave her no medicine until June 1st, and then only some æther and gentian for her stomach, intending to wait to see what would take place when she ought next to be unwell. She suffered less from palpitation, and seemed in better health.

June 7th.—She complained of uneasiness in her head and stomach, and of feeling very weak. The

bowels were also very costive.—R. Pil. Col. Rhei, Haust. Mag. Sulph. Steel pills.

25th.—Much the same.—R. Pil. Al. Rhei, Decoct. Cinch.

28th.—Pain in the back to day, but has not yet been unwell. Hip bath.

30th.—Same state.—Ordered croton oil, and Mist. Ferri Comp. instead of pills.

July 15th.—As menstruation had not yet taken place, I began the Ol. Sabinæ, in doses of a drop, twice a day. On the 17th the dose was increased to two drops, on the 19th to three, on the 20th to four, on the 22nd to five. Complaints of weakness, but less of pain in the head and stomach, and says her general health is much better. On the 25th she took six drops, bis die. On the 28th she took seven drops. In the night she had pain in the body, and seemed not so well, but I think it was occasioned by some opening medicine taken the day before, which had acted rather powerfully. On the 31st she took eight drops twice a day, on the 2nd of August nine drops; says she feels rather sick after taking it. Not thinking, however, from the absence of pain in the stomach, that her sickness was produced by the savine, I continued it, giving her on the 9th twelve drops twice a day, but on the 11th she told me she felt sick after every dose, and looked more out of health, so I thought it right to discontinue the medicine for a time, and made her an out-patient, no effect upon the uterus having been obtained from the use of the savine in this instance.

In the hospital I have employed savine only in these three cases at present, but they are sufficient to prove two important facts respecting the drug,—*first*, that it may be given with perfect safety in larger doses than those given in Mr. Pascoe's case;* and *secondly*, that, as it succeeded in two out of the three cases, it *ought* to be employed in obstinate cases of amenorrhœa, especially when other more usual methods of treatment have failed.

MY NOTE BOOK.

(No. I.)

By HENRY JOHNSON, M.D., EDIN.,

SENIOR PHYSICIAN TO THE SALOP INFIRMARY.

SILICIOUS DEPOSIT IN THE URINE, SUPPOSED TO BE FROM THE USE OF NEW SPONGE.

SILICIC acid is a well-known constituent of natural urine,† and of urinary calculi;‡ and it is always found in urinary concretions derived from brutes, according to Wurser and Lapaigne.§ But although, on the authority of these names, the occurrence of silex in urinary deposits and concretions may be deemed possible,

* Mr. Pascoe gave four drops and a half three times a day.

† Berzelius.

‡ Rayer and Dr. Yellowby.

§ Urinary Deposits, by Dr. G. Bird, p. 213. 1844.