

## HAMAMELIS VIRGINICA.

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HAMAMELIS VIRGINICA, commonly known as American witch-hazel, has long been employed in the southern and western portion of the United States as a domestic panacea for all forms of wounds and bruises. Its undoubted hæmostatic and anodyne effects, when used in this manner, led very many physicians to test its value both internally and externally.

*Active Ingredients.*—H. K. Bowman states that the bark contains upwards of 8 per cent. of tannin. Bartlett, from an analysis of Pond's extract, which is by no means the most certain preparation of hamamelis, reports that it contains a peculiar astringent principle which is thought to be volatile at a low temperature, a diffusible volatile oil, and an oleo-resin like terebene. The precise active ingredients of the bark appear, however, to be still unsettled.

*Physiological Action.*—Dujardin-Beaumez believed it owes its utility to an action on the muscular fibres of the veins. Phillips, in considering the subject, adds that Hector Guy reports, after observing the effect of very large doses on frogs and rabbits, that no signs of poisoning were produced; neither is the plant poisonous to man, nor does it show any special physiological action on the vascular system (Thèse de Paris, 1884). Headache, he further adds, and in some cases depression, have, however, been attributed to full doses. Ringer, likewise, in his work on Therapeutics, refers to the latter action of full doses of the tincture. Wood and Marshall, in recent investigations of the root report negative physiological results. Some of the observers just referred to and others have consequently come to the conclusion that the so-called virtues of the preparations of hamamelis depend upon the alcohol they contain, and on the faith of the patient.

The *Provincial Medical Journal* of England, in commenting upon the views and deductions first cited, adds: "This conclusion seems an extraordinary one, when the results obtained with hamamelis by some physicians are taken into consideration, and when, moreover, the styptic properties of certain essential oils—such as turpentine, erigeron canadense, etc.—are borne in mind."

*Therapeutic Action.*—The published reports of cases in which hamamelis has been administered vary considerably. Some observers claim that it is a potent therapeutic agent, while others assert that it is of little or no value. This wide discrepancy is due in part to differences in the strength and dosage of the preparation employed, and in part to its employment in inappropriate cases. According to my experience, the preparation from which the most certain results can be obtained is the fluid extract prepared as directed in the *United States Pharmacopœia*, by exhausting 100 grammes of the bark in a sufficient quantity of alcohol and water to make 100 cubic centimetres. The dose of the fluid extract should not be less than twenty minims, and may be increased to two teaspoonfuls, or more if necessary, without producing any untoward symptoms. The therapeutic deductions which follow were drawn from clinical research in my own practice and that of many physicians who have used the fluid extract of hamamelis; that its action is depending upon the alcohol in it, I can, from my clinical experience, most decidedly deny, from testing cases at the same time with diluted alcohol and the fluid extract of hamamelis. The styptic properties and other valuable therapeutic actions claimed for hamamelis were not observed upon giving diluted alcohol in the diseases to which I shall refer later in this paper, but were marked and decided upon the employment of the fluid extract of the bark; and, therefore, from my own experience and that of very many other practising physicians, I regard hamamelis as a powerful astringent and hæmostatic; it is also slightly sedative and tonic, stimulating the appetite, and improving digestion. It is a remedy *par excellence* in all forms of gastric hæmorrhage, and in disease due to a relaxed condition of the venous and capillary walls. It is also serviceable in various forms of active hæmorrhage as an adjuvant to any of the cardiac sedatives. It will be found promptly curative in cases of hæmoptysis in which the attacks are prolonged and the hæmorrhages are small in quantity, indicative of a continuous oozing, rather than of an arterial or capillary rupture. In cases characterised by sudden and copious hæmorrhage, attended by a full and frequent pulse, hamamelis will only be effective when combined with full doses of aconite, veratrum viride, or other cardiac depressants.

Hamamelis will frequently act like magi<sup>6</sup> in checking menorrhagia after quinine, ergot, gossypium, cimicifuga, and the mineral acids have failed. It will not, however, be of any avail in restraining the bleeding due to polypi or other abnormal growths. It is most effective in anæmic patients, and in subjects of the lymphatic diathesis in whom the sanguinolent flow is probably due to relaxation of the muscular coat of the uterine vessels. It is also potent in checking the bleeding which in some women continues without any assignable cause for several weeks after parturition. Hamamelis is one of the most efficient remedies that I have ever employed in the treatment of epistaxis. As is well known, cases of this affection sometimes persist for several days, even after the administration of ergot, digitalis, matico, iron, and sulphuric acid, and the local application of various astringents. If hamamelis be resorted to, however, I am confident that the bleeding will be either promptly checked or reduced to such an insignificant amount as to remove all apprehension.

It is necessary, however, in order to secure the desired result, to consider the pulse and general condition of the patient. If the pulse is rapid and bounding, and the nervous system in a state of excitement, hamamelis alone will not restrain the flow. It must be combined with veratrum viride, or aconite, and morphine. In such cases I usually order R̄ Tinct. veratri viridi, ℥xii; morphinæ sulphatis, gr. i; ext. hamamelis fl. ʒi; M. Signetur, one teaspoonful every hour.

If the pulse, however, is normal, and the patient free from alarm, the administration of one drachm of the fluid extract of hamamelis every hour for three or four hours will usually be found sufficient. In chronic cases, where the bleeding is minute but persistent, the continuous passage of a solution composed of two ounces of the fluid extract of hamamelis to one pint of water will usually act like a charm. In all cases, however, ice-water should be freely applied to the top of the head and nape of the neck during the continuance of the bleeding. Hamamelis has yielded the most gratifying results in my hands in the treatment of two cases of hæmophilia; I have also employed it with marked benefit in a case of hæmitidrosis in which iron, quinine, nitric acid, and turpentine had failed. I have not had any experience in its employment in hæmatemesis or hæmaturia; but, reasoning from analogy, I believe it will be found serviceable in these affections when the bleeding is of a passive character. Hamamelis is especially valuable in cases of hæmorrhage from the bowels, especially from those of a chronic character occurring in persons of sedentary habits. I have employed it with success in three such cases after the usual remedies had been administered in vain.

Hamamelis is an effective remedy in purpura. I have notes of two cases of this disease in which relapses occurred during the administration of arsenic, quinine, ergot, and oleum terebinthinæ, but which rapidly and permanently recovered when placed upon half teaspoonful doses every four hours of the fluid extract of hamamelis. The therapeutic powers of hamamelis are displayed to striking advantage in the treatment of varicose veins and varicose ulcers. My attention was directed to its value in these troublesome affections by an article written by Dr. J. H. Musser for the *Philadelphia Medical Times* in April, 1883. Prior to that time my treatment of these cases had been troublesome, and not always satisfactory. Dr. Musser's results were so superior to any I had ever heard of, that I decided to resort to hamamelis also. Since then, my treatment of varicose veins has consisted of the application of a firm cotton bandage, and the administration of one drachm of fluid extract of hamamelis four times a day. For varicose ulcers, I direct the ulcerated surface to be touched twice daily with a lotion composed of two drops of nitric acid and four ounces of water. The affected limb is then firmly bandaged, and the patient is directed to take one drachm of fluid extract of hamamelis four times a day. Of seventeen cases treated in this way during the last three years, I lost sight of three, eleven were discharged cured in from three weeks to four months, the remaining three were found to be suffering from tertiary syphilis, and did not show any improvement until placed upon a mercurial course in addition, when they rapidly recovered.

I do not pretend to say that the swollen veins returned to their pristine size in every case. In several cases they remained slightly swollen, but the pain, discomfort, and ulceration disappeared, and the patients were enabled to resume their usual avocations. In one remarkable case, the patient was a woman who had suffered throughout five successive pregnancies with varicose enlargement of the veins of the left leg. When she consulted me she was carrying her sixth child, but did not expect to be delivered for nearly six months. The veins of both legs were tortuous and enormously swollen, and the inner side of the right foot and ankle was an almost continuous mass of ulceration. The pain was so excessive that she had not been able to walk for a week, and had not slept or eaten for

three days. The right side of the vulva was also swollen, purplish, and cedematous.

This was an unpromising case, but as I had been impressed with the value of hamamelis in similar conditions, I assured her that she would obtain speedy relief. I directed her to bathe her limbs in cold water four times a day for ten minutes at a time, and to bandage them firmly immediately after bathing. I also directed her to keep a cold wet compress constantly against the swollen portion of the vulva, and to take one drachm of fluid extract of hamamelis every four hours, and a compound cathartic pill every second night. Improvement began at once. She slept well that night; her appetite and spirits returned. In three days she was able to walk with ease; the ulcers healed by the twelfth day, and within two months all traces of varicosity had disappeared. She was delivered safely at the proper time; and, although she has been pregnant again, and delivered of her seventh child, no symptoms of her former trouble ever reappeared.

Three cases of varicocele in which I exhibited hamamelis improved remarkably, so that all idea of performing an operation for permanent relief was discarded as unnecessary.

Hamamelis will be found very effective in the treatment of painful and bleeding hæmorrhoids. In this class of cases it should be given internally in decided doses, and applied locally in the form of a 20 per cent. ointment or lotion. Laxatives should be administered in addition, in order to keep the bowels freely open until a cure is effected.

Hamamelis is a valuable remedy in the treatment of subacute and chronic diarrhoea. It appears to be especially indicated in cases characterized by frequent painless watery or mucous discharges. Its value is enhanced by the addition of a small quantity of opium and nux vomica as in the following formula: *R. Tinct. opii deod.*,  $\pi$  xx; *tinct. nucis vomice*,  $\mathfrak{z}$  ss; *ext. hamamelis fl.*,  $\mathfrak{z}$  i; *M. Signetur* half a teaspoonful in water every three hours.

Hamamelis is an efficient remedy in the treatment of leucorrhœa and chronic gonorrhœa, if administered internally in doses of from twenty to thirty minims three times daily, and also employed as an injection diluted in the proportion of one part of the fluid extract to twenty parts of water. When diluted in this proportion, as used in the form of the tincture, it will also be found valuable as an external application in hyperidrosis, acne rosacea, seborrhœa, intertrigo, eczema, and some forms of pruritus. The same solution will also be found serviceable as a mouth-wash in mercurial stomatitis, scurvy, and softening of the gums from various causes. It may also be employed with advantage as a local application in naso-pharyngeal catarrh, and as a gargle in chronic pharyngitis, and in all relaxed conditions of the pharyngeal and laryngeal walls. As an application to incised and lacerated wounds I know of nothing better than the following lotion: *R. Tinct. opii deod.*,  $\mathfrak{z}$  ss; *ext. hamamelis fl.*,  $\mathfrak{z}$  ss; *aqvæ*,  $\mathfrak{z}$  iiii.

### PYREXIA WITHOUT DETECTED PHYSICAL SIGNS.

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In the JOURNAL of December 4th, 1886, there appeared an interesting and instructive paper by Dr. Hale White on "Inexplicable Pyrexia." It may be of interest if I place on record the following case as another example of the condition described; it will also add to the literature of the subject, and may aid in its investigation. At the present time this pyrexia seems to point to some alteration in the nervous centres.

W. B., aged 63, presented himself on August 6th, 1866, as an out-patient at the Rugby Hospital. He complained of great weakness, and staggered as he walked. He looked very ill, and was wasted considerably. I took his temperature, and found it was 102° F.; but, after a very careful examination, I could detect no physical signs. On August 10th I admitted him into the hospital. He still complained of nothing but weakness, but said he had had a slight sunstroke a month ago while haymaking. I examined him again, and on several other occasions, but was never able to find any local physical signs. I need not occupy space by recounting the absence of special signs. He remained in the hospital under daily investigation for six weeks, during which time his temperature varied from 98° to 103.8°. On some days it was normal in the morning and 103.8° at night; on others it was higher in the morning than at night; while at other times it was equal throughout the twenty-four hours (101.5°). Beyond complaining of aching in the calves of his legs, which kept him awake at night, I could never elicit any other symptom. He improved in health with good nursing, but he left the hospital with his high temperature remaining as it was when he entered.

## REPORTS

### HOSPITAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

#### POPLAR AND STEPNEY SICK ASYLUM.

##### AN UNUSUAL CAUSE OF EMPHYSEMA.

(Under the care of WM. H. PEARCE, M.R.C.S.E., Assistant  
Medical Officer.)

WM. P., aged 44, was admitted in a dying state into the Sick Asylum on Monday, October 25th, 1886, at 5 P.M. From the little information that could be gathered from the man himself or his friends, I learned that he had always enjoyed good health, and had followed his usual occupation up to the Saturday previous. He admitted being a "free drinker," and on the Saturday night he had been the "worse for liquor," but, so far as he knew, he was not injured in any way. He did not feel well on the Sunday, and he remained in bed until late in the afternoon, when he dressed, and went out for half an hour; soon after his return he began to swell, and his breathing got bad. He had urgent dyspnoea, his skin and mucous membranes being very blue, and his pulse quick and feeble. His face and neck were much swollen, and on palpation this was found to be due to emphysema of the subcutaneous connective tissue, which on further examination could be traced all over the trunk as low down as the hips, and for some distance down the arms. He denied having sustained any injury. After a careful examination by my colleague, Mr. John Bostock, and myself, no injury to the ribs or respiratory tract could be made out. The chest-wall moved very little on respiration, the breathing being for the most part diaphragmatic.

Percussion elicited a resonant note all over the chest, though at the bases and in the axillæ the note was flatter than that obtained at the anterior and upper part of the lungs; in the former situations there was almost an entire absence of breath-sounds on both sides in the lower half of the chest, but in the former air entered freely. The heart's apex could not be made out, his breathing gradually became worse, and he died somewhat suddenly three hours and a half after admission.

*Necropsy Forty Hours after Death.*—The body was that of a stoutly-built, well-nourished man, of middle age. On opening the chest there was no fracture or other injury to the chest-wall, but both pleural cavities contained a considerable quantity of fluid, the lower lobes of both lungs being compressed and airless; much recently-effused lymph covered the surfaces of the visceral and parietal pleuræ on both sides. On clearing away this and separating the lower part of the left lung from the pericardium, a collection of undigested food was found outside the œsophagus, occupying the posterior mediastinum, and surrounded by emphysematous connective tissue, which could be traced up the spine to the root of the neck. The food had escaped through a ragged slit-like opening, half an inch long, situated vertically in the œsophageal wall, about an inch and a half from its lower end. Passing downwards in the substance of the wall of the œsophagus was a sinus which connected the opening with a small circumscribed abscess (about the size of a hazel-nut), situated in the wall of the stomach along the lesser curvature, close to the cardiac orifice. This again opened into the cavity of the stomach by a small opening, so that gas or air could pass in freely from the œsophagus or stomach. A small quantity of pus was found in the small abscess in the stomach, but there was no sign of any in the mediastinum. There was no trace of ulcer in the œsophagus, the opening being a mere ragged slit, with black, unhealthy edges, outside which the gullet appeared healthy, but here, no doubt, the mischief must have begun, and an abscess formed, the pus burrowing down, and finally discharging into the stomach, the œsophageal wall giving way either at the same time or later. As to the cause of the abscess, the only thing that suggests itself to my mind is the lodgment of a foreign body, such as a spicula of bone, but there seem to have been no symptoms up to the time when the œsophageal wall gave way, and gas or swallowed air escaped into the mediastinal connective tissue. I did not make out before the necropsy the considerable amount of double pleuritic effusion, believing, as I did, that the emphysema must be due to an injured lung from some obscure fracture, and that the compression was being exercised by internal hæmorrhage.