

ing the most explicit confidence that the silk can entirely supersede the cotton plant. Its fibre or staple is longer and firmer and of a gloss no silk or satin can match. During ten years I have planted cotton in Yazoo, Mississippi Valley. My brand was sought by the Liverpool and Manchester speculator, and brought the highest prices; and on that practicable experience I ground my convictions with regard to the Silk Weed, and, as a Canadian, I feel a double interest toward its success for Her Majesty's Government. I shall be happy on all occasions to convey to your Excellency any further information that may be required, and inclose you a few more seeds, and remain your Excellency's most obedient servant,

(Signed), FREDERIC W. HART, M. D.

St. Louis Mission, May 1st.

Who knows but this fibre plant, Silk Weed or *Asclepias*, may, from its hairiness, glossiness and fibrous texture, yet take the place of cotton, which could not grow in Canada, lying so far north as it does. But this plant, borne from the heights of the Rocky Mountains, may find a more congenial home in the less rigorous climate of Canada.—*Kingsion Whig*.

—The Librarian of the Literary and Historical Society of this city has received a pamphlet by G. D. Gibb, Esq. M. D., on the uses of one of our common wild plants, viz: the Blood-root or *Sanguinaria Canadensis*.

It appears that the Flora of Canada is likely to contribute essentially to the materia medica, providing new remedies for those ills which flesh is heir to. The *Podophyllum* or May-apple seems to have a good position as a remedial agent in the old country. The *Sarracina* or pitcher plant is now used as a remedy for small pox, and we hear that a large order has been received in Quebec to ship a quantity to France. The blood-root, some six years ago, was recommended as a sure cure for cancer, but failed as a sure remedy: whether it may be found of use in some cases perhaps deserves further trial. This time the blood-root is not introduced to the British public as a specific for any disease, but its general action on the human system is studied, so that where the physician wishes to produce certain effects he has to consider whether the Canadian blood-root will not sometimes answer his purpose better than the remedies he has usually employed. The blood-root has been made to yield its chemical active principles called *Sanguinarina*, which, of course forms the usual salts with sulphuric and other acids. We also notice in the pamphlet formula for powders, infusions, decoctions, oils, extract, tincture, wine, syrup and ointment, on all of which we wish to make no comment, except that it indicates great attention to the medicinal properties of the wild flowers of Quebec, of which attention, we trust, a more extended trial will prove them worthy.—*Quebec Chronicle*.

—The *Kingsion Whig* contains a long account of the proceedings of a meeting of the Botanical Society of Canada held in the Convocation Hall of Queen's College, for the purpose of electing His Excellency the Governor General as Patron. The Very Revd. Principal Leitch, LL. D., was in the chair, and Professor Lawson acted as Secretary. Principal Leitch announced to the meeting the object for which they were assembled, viz: the formal election of Lord Monck as Patron of the Society, a resolution having been previously passed by the Society to elect him. Professor Lawson, Secretary, had communicated with His Excellency on the subject, to which His Excellency had replied that he would with pleasure accept the honor of Patron to the Society. The Society formally elected him Patron. Letters and other communication from Governor Macfarish of Assiniboia, and Dr. Schultz, Secretary of the Institute, Rupert's Land, Red River, were then presented to the meeting. They expressed their high sense of the importance of geological and botanical societies for the diffusion of useful knowledge, and said that even in the far-off wilds of the Red River settlement their beneficial influence was beginning to be felt.—*U. C. Journal of Education*.

—Silver is the foundation of photography. When this metal is combined with certain other elements, iodine, bromine, &c., if the compound is exposed to the sun's rays, the hold of the two substances upon each other is loosened in some mysterious way, so that they may be then separated by certain other substances which would have no effect upon them before they had been exposed to the light. This curious power which the solar rays have of acting upon certain compounds of silver makes possible the art of photography.

Silver is purchased by photographers always in the form of the nitrate, and in the process it is converted into the iodide, bromide, chloride, cyanide sulphide, and other compounds, not all of which are understood. The editor of the *Photographic News* says that not one-tenth part of the silver used enters into the picture, and Prof. Seely, the editor of the *American Journal of Photography*, states the amount at less than one hundredth part. It is estimated that more than a million of dollars' worth of nitrate of silver is annually consumed by the photographers of this country, of which more than 900,000 dollars worth is wasted. To save a considerable portion of this great waste is the object of the invention here illustrated.

The plan is to set a vessel below the spout of the sink in the laboratory so that all the water used in washing the plates and other manipulations may pass through it. The vessel is to contain a supply of some substance that will decompose the silver salts held in solution in the

water, and form an insoluble compound which will consequently fall to the bottom. The substance used is the proto-sulphate of iron, and it is so arranged that it may be dissolved in quantities proportioned to the amount of the liquid that passes through the apparatus.—*Intellectual Observer*.

—The Commissioner of Crown Lands says in his report of 1861 that the experiment (begun in 1859) of transplanting oysters from beds in the waters of New Brunswick, having proved upon examination to give promise of success, it was this fall continued. Those laid down in Gaspé Basin during the autumn of 1859, were examined and found to be not only in a good state of preservation, but growing and having every appearance of reproduction. At the trifling expense of \$232.80, 300 bushels of carefully picked oysters from the banks at Caraquet, were planted about the same localities. Although the Legislature has made a liberal allowance for testing the possibility of raising oysters along our coasts, the utmost care and strictest economy have been observed in using the money so provided.

—At Malta, where Mr. Lassell has erected his magnificent 4-foot reflector, he observes the details of the moon with a sharpness and distinctness which he had never seen before. He states that, if a carpet the size of Lincoln's Inn Fields were laid upon its surface, he could tell whether it was round or square. He adds, in a letter to the President of the Royal Society, "I see nothing more than a repetition of the same volcanic texture—the same cold, crude, silent, and desolate character which smaller telescopes usually exhibit."—*Intellectual Observer*.

—In a communication to the French Academy on the 9th of June, M. Beau connects the practice of tobacco-smoking with that very painful and dangerous disorder, angina pectoris. In one case a gentleman of sixty passed the greater part of one day in smoking, and during a month he suffered violent palpitations at night, accompanied by oppression and shooting pains in the shoulders. On leaving off smoking, the symptoms disappeared. Three months afterwards he betook himself again to tobacco, and brought back the complaint, which finally left him when the narcotic weed was definitively abandoned. In the second case a physician about fifty smoked cigarettes all his spare time, his digestion was bad, and he suffered nightly attacks of angina. He gave up smoking and the disease subsided, but sitting in a room filled with tobacco smoke was enough to cause a return of the pains on the following night. In the third instance a physician of thirty-five smoked as he went his rounds in the country, and for a long time suffered loss of appetite. One morning, while smoking upon an empty stomach, he was seized with frightful pains in the region of the heart with constriction of the chest. He could neither walk nor speak, his pulse became insensible, his hands cold. The attack lasted half an hour. By M. Beau's advice he left off smoking, promising to let him know if the disorder returned, which does not appear to have been the case. In a fourth instance a young Spaniard continually smoked cigarettes. His appetite vanished and his digestion became difficult. One evening, while smoking, he felt a sudden and violent pain in the chest, as if he had been squeezed in a vice, and his pulse became insensible. The attack lasted ten minutes, and being frightened he consented to forego smoking, and suffered no more. In a fifth case a physician was subject while a smoker, to constriction of the thorax and neuralgic pains. In a sixth case a merchant suffered similar attacks, but stuck to his cigar, and his disease. In a seventh a hearty man of seventy-five smoked desperately to get rid of his cares, and had three attacks of angina, the last of which killed him. An eighth illustration was afforded by a smoking diplomatist who died suddenly under similar influence. M. Beau observes that M. Bernard produced in various animals a disorder resembling *angina pectoris*, by introducing nicotine into the thorax. He adds, that for tobacco-smoking to produce this disease the practice must be in excess, the individual endowed with a peculiar susceptibility, and likewise suffer from some debilitating circumstance, such as grief, fatigue, or indigestion. Then he considers that the system cannot expel the matter absorbed from the tobacco, and nicotine can accumulate sufficiently to exert a poisonous action on the heart. (*Ibid*)

—The *Comptes Rendus* contains an account of experiments and observations by this distinguished surgeon, [Mr. Flourens] showing that wounds of the brain are easily cured. He cites several instances of human beings who have recovered from injuries involving loss of a portion of their brains, and adverts to his own proceedings in introducing leaden balls into the brains of rabbits and dogs. He made a hole in the skull with a trepan, cut through the *dura mater*, and made a slight incision into the brain itself, in which he placed the ball, which gradually sank into the cerebral substance, making a kind of fistula that cicatrized. If the ball was not too big, the whole thickness of the cerebrum or cerebellum might be traversed without being accompanied or followed by any bad symptoms or disturbance of functions. He states that, in 1822, he removed one lobe from the brain of various animals, who recovered perfectly, and only lost the sight of the opposite side; and he adds, "but the most remarkable thing was when I removed the whole cerebrum, or both lobes. The animal deprived of his brain survived more than a year, but he had lost all his senses and intelligence, and was reduced to an automaton." In another instance he took away all the cerebellum, and this