The State text book system (i.e., text books published by authority of the State, as was formerly done in this Province) is being rediscussed in the United States. being rediscussed in the United States.

A scheme is on foot to establish a Technical University in London, Eng. The old land is steadily waking up to the necessity of educating her mechanics and artisans.

In Kentucky there are 5,800 white and 532 coloured schools, attended by 200,000 children, and yet there are 150,000 children growing up in absolute ignorance of the elements of an English education.

Tanaka-Ruimara, senior Vice Minister

Tanaka-Fujimaro, senior Vice Minister of Education in Japan, who visited Canada in 1876, has published a report of the Japanese Commission on the Educational Department of the Centennial. In the United States the cost per head of ducation varies from \$18.62 in Detroit, to

\$33.78 in San Francisco. In Boston it is \$31.40; in Chicago, \$20.06; in New Orleans, \$28.26; and in New York, \$29.38. Phillips' Academy, Andover (Mass.) will

belebrate its centennial on the 5th and 6th June next. Historically this institution nay claim the highest rank as the fountain

The annual conference of the Head Mas-ters of the English Public Schools and Col-leges was held recently at Marlborough College under the Presidency of the Rev. College under the Presidency of the Rev. C. C. Bell, Master of the College. There was a large attendance of the representatives of the leading schools. Many excellent papers were read, and the subjects discussed were "School Punishment," The Discipline of Day Boys," "Advantage of the system of Miner Scholarships," "Experience of Examinations under the Oxford and Cambridge Board." On the invitation of Rev. Dr. Montague Butler, the next conference will be held at Harrow.

There are twenty-one Universities in the German Empire, with 20,229 students, of whom 2,500 do not attend any lectures, of the 17,729 others, more than one-third follow the lectures on Philosophy (including the Sciences.) The faculty of Theology has the least number of students, being attended by only 2,223. Berlin University has the largest attendance at lectures, having 4,507 students. Strasburg University ing 4,597 students. Strasbourg University is eleventh on the list and Rostock is the last with only 114. The number of Pro-fessors paid by the German Empire is 1,300. The Universities receive about £500,000 rom the Imperial Government, but this sum varies, for in 1875, Strasbourg alone received £200,000. The other German received £200,000. The other German Universities, situated beyond the confines the Empire are Basle, (Switzerland), Doxpat, (Russia), Vienna, Innsbruck, Prague, and Czernowitz, (Austria), so there re altogether twenty-eight of them in

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Sceptical persons will be perfectly amazed Scepucal persons will be perfectly amazed by trying them, to see the great benefit desived. Even headache is quickly cured by wearing one just below the breast bone; and for the hysterics, relief is found at once by the application of one over the navel. DYSENTERY, and all affections of the bowels, to the worst cases of CHRONIC COSTIVENESS, cured by wearing a Por-

ous Plaster over the bowels.

Weakness and fatigue are invariably cured at once by their use. Doctors of all classes, both in this and in foreign countries, are daily recommending them for all local pains. I am constantly having large orders from the various hospitals of our country. various hospitals of our country, as well as from foreign countries, for my Celebrated Porous Plasters; and on each order they comment on the great virtue of the Porous Plasters, and the great blessings they are to the human race, and are continually telling me of my being a public benefactor.

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and other poisonous material commonly used in the manufacture of ordinary plasters. One trial is a sufficient guarantee of their merits, and one plaster will sell hundreds

merits, and one plaster will sell hundreds to your friends.

In this changeable climate they should be worn between the shoulders and on the breast, or over the kidneys, especially by those who take cold easily. The Porous is easy to wear, and puts new life into persons who feel dull and morbid.

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great blessing to the consumptive.

Be sure and ask for MITCHELL'S PORon them, as there are many worthless imitation : take none but MITCHELL'S. Prepared by GEO. E. MITCHELL, Lowell, Mass. Sold by all Druggists. 297

A youth of Augusta, Ga., who was mar-ried by a magistrate the other day, insisted that the bride should pay the fee, as he

It is said that we are on the very thres-It is said that we are on the very threshold of a very important modification of the art of photography. Hitherto the utmost efferts of photographers have failed in reproducing anything beyond gradations of light and shadow. It is true that negatives have been coloured, and the pictures reproduced in the natural colours, and this in itself was one of the great advances made a short time back, and chronicled in the loan exhibition of scientific apparatus. The present discovery is of far greater importance, and is due to the perseverance of Major Abdy, who has succeded in already reproducing various shades of blue upon the negative plate, and transferring them in the same shades to the positive picture. Major Abdy, who has recently been appointed to a permanent post at South Kensington, is now hoping to reproduce the shades of red, and when he has completed the series of experiments on completed the series of experiments on which he is engaged, he will explain his method, and display the results of his la-

THE FOOT AND THE POUND. -The foot THE FOOT AND THE POUND.—The foot and the pound are found in every country and have evidently been derived directly from the Romans. But they can claim a far higher antiquity, for Mr. Chisholm traces their origin to the Babylonians or Chaldeans, who, as units of length, used both the cubit and the foot. These were subsequently adopted by the Egyptians, who introduced considerable variety, so that there is no little confusion between the different kinds of cubit and foot. The natural cubit, of about 18 inches, and the foot, which was two-thirds of this length, were transferred to Greece, and, the cubit having fallen into disuse, the foot became the ordinary standard of the Romans. At the same time the double cubit, which was equivalent to three feet, would appear to equivalent to three feet, would appear to have survived in the form of the ell of medhave survived in the form of the ell of medieval Europe, and in that of our own yard. As all these measures were originally derived from the proportions of the human body, some caution is necessary in referring their origin to remote antiquity rather than directly to the length of the forearm or of the foot. It must be admitted, however, that the coincidence of length among all civilized nations is very striking. The derivation of the pound weight is more complicated. The earlier Tower pound appears to have been of Roman origin, being presumably identical with the Greek-Asiatic mina, while the hundredweight corresponded to the talent or weight of a cubic foot of water. Subsequently the Troy pound was substituted, and for commercial transactions, the pound avoirdupois, from the old French pound of 16 ounces. It is evident, however, that our

AGRICULTURAL

MANITOBA. SIR,—In the agricultural columns of your very interesting paper I see a little advice as to the quality of wheat we should be careful to sow; also a desire on the part of one of your correspondents to hear from this far off lone land called Manitoba. One of your correspondents says we may as well expect a full-bred Durham from a cross as a good sample from small seed. Now, sir, I was raised in a very extensive farming part of the country in England, and I must say our practical farmers there without exception save small wheat for seed, and I have seen as much as sixty-four bushels of wheat to the acre, good sample. I consider it is the hardest work a farmer wants in any part of the Dominion to get pure seed wheat. Neither do I consider it very much to any man's advantage to take wants in any part of the Dominion to get pure seed wheat. Neither do I consider it very much to any man's advantage to take a great deal of trouble to secure pure seed wheat so long as all ripens together. I have seen in Ontario seed wheat brought in by certain parties, giving it a fine name, and disposing of it at a large figure, when it is found out to be a mixture of different kinds. Last year I tried very hard to secure pure seed wheat in order to supply Ontario buyers wanting to secure seed. I soon found out it was mixed; but I failed te see which was best either for quantity or quality. In 1876, when the relief seed wheat came in from Minnesota, we found found it mixed: what we considered two kinds, bald and beardy, but we soon found out that by carefully rubbing out the beardy and sowing it, it was just as likely to grow one kind as the other, both ripened together, and we failed to see any difference after thrashed. I very much approve of wheat for seed being perfectly clean, and the reason for the seed wheat not being clean, coming from Manitoba in 1867 to Ontario was easily explained. The season was very wet, and any practical farmer knows that rich land will grow something, and when the wheat was killed weeds grew in the place, and all thrashed weeds grew in the place, and all thrashed together, and fanning mills very scarce and together. I have dead to see any different and the place is the construction of wooden ships. Fig. 5 represents a bifurcated piece; Fig. 6 an elbow, of which the upper part deviates the foundation.

weeds grew in the place, and all thrashed together, and fanning mills very scarce and not much money to pay for them. Our grain last year was much better, and a large quantity of very good wheat was shinned grain last year was much better, and a large quantity of very good wheat was shipped to Ontario from this settlement by a Mr. Smith, near Guelph, in my mind superior to anything I have seen in Ontario, and some was shipped to Scotland for seed purposes. I am very much in favour of changing seed. I think our seed wheat should do well in the older parts of our Dominion, and some of us will do all we can to secure a first-class grain to send down to Ontario for seed. Your red chaff would do well here, I think. If there is any of your correspondents that would like

any of your correspondents that would like to have any information, either privately or through your paper, I shall take pleasure in considering your interests.

WM. TAYLOR. Meadow Lea, Man., Jan. 28th, 1878.

to inform me through the columns of your paper what would be the best kind of

Admitted. One of the superintendents, after sending forward a man to see that everything was in good order, led the reporter to the first floor. Here was a number of large tasks, into which had just been thrown quantities of fat direct from the butcher shops. The scraps and what is called inferior fat, are separated from the butcher shops. The scraps and what is called inferior fat, are separated from the butcher shops. The scraps and what is called inferior fat, are separated from the butcher shops. The fat, which is to become butter, is elevated to the tallow-house. The fat, which is to become butter, is elevated to the tallow non the hock, 10.

Tail.—Well set up on back, tapering and not coarse, 2.

Lease Short straight and incidents, after some constitution inside that he was admitted. One of the superintendents, after sending forward a man to see that everything was in good order, led the reporter to the first floor. Here was a number of large tasks, into which had just been thrown quantities of fat direct from the butcher shops. The scraps and what is called inferior fat, are separated from the better grade, and taken to the tallow-house. The fat, which is to become butter, is elevated to the upper floor, where it is cut up like sausage meat. Placed then in



Fig. 5.—Bifurcated Joint. about 50° from the straight line; Fig. 7 where it deviates at an angle of 80°; while in Fig. 8 it deviates at an angle of nearly

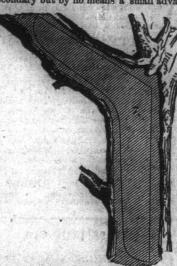
to inform me through the columns of your paper what would be the best kind of spring to sow on low loamy ground, and what kind is not so apt to rust? Also, what kind of oats would be best to sow on the above named kind of soil? Also, what is the best time to prune grape vines? I would like if you could give me some information on budding and the proper season for doing it in.

Yours respectfully,

JOHN CLELAND.
Hillsdale, 31st Jan., 1878.

THE HESSIAN FLY.

Enclosed please find some roots of wheat containing the eggs of the Hessian Fly. The top, you see, is entirely destroyed; the roots were, when taken from the ground, sound and full of sap. "Will you please give the time when these insects hatch and leave the wheat, and when they hatch do they make other deposits in the growing wheat, etc.? It has been recom-



THE LADIES' CORNER.

(Edited by Rose Geranium.) The editress of this department of The Mail will endeavour to answer all questions presented to the satisfaction of correspondents. Contributions that will be of interest to readers are solicited. But let them be practical, and to the point. Recipes for cooking, or for household work of any kind, that have been tested, will be welcome. We will be glad, also, to receive any suggestions as to the adornment of home, or that will add to its comfort and happiness.

THE BEAUTY OF WOMEN.

It is impossible to go much into society without being struck with the beauty and the great improvement visible in American girls and American women during the past twenty-five years. Forms are rounder, cheeks more blooming, laugh more hearty, voices more full and sweet, eyes more bright, complexions more rich, feet and hands, and, above all, appetites more natural.

single states of the control of the



the servants, nor tell you how many sheets and tablecloths the house requires, nor in any other way deprive you of the healthful occupation necessary to the preservation of health and good looks. Activity, occupation, in addition to proper food and proper clothing, are the fountains of youth and beauty, and the reason why married women are growing young is, that men are more and more putting the business of households into their shands, simply furnishing the means, which properly divides the labour and puts the woman in her natural position as household manager, caretaker, and disburser. Women only need right conditions to be beautiful, every one of them.

Dear Sim,—In a recent number I notice a short article Reided "Attractive Homes." I was very much pleased withit, the case is and their wives care enough about the case is and their wives care enough about the homes; I do not think as a class, farmers and their wives care enough about the homes; they do not think it is a manager and the properly divides of the most article Reided "Attractive Homes." I was very much pleased with it, for the care they are little and common ! Take of instance the mother who has had broken a large and common ! Take the properly divides the labour and puts the woman in her natural position as household manager, caretaker, and disburser. Women only need right conditions to be beautiful, every one of them.

Dear Sim,—In a recent number I notice a short article Reided "Attractive Homes." I was very much pleased with it, because I believe it is a subject that will be a discussing; I do not think as a class, farmers and their wives care enough about the properly divides of the course of the course of my representations that a large American ship, per later another American ships of war passed through to Constantion obtains, and, as will be seen, two American ships of war passed through to Constantion obtains, and, as will be seen, two American ships of war passed through to Constantion obtains, and, as will be seen, two Constantions, an

precity things. Many ladies and gentlemen in the States, as well as their children, have taken to making these things with the tradile-saw. Many of them draw their own designs. Of course it shales a dever person to do that. But for those who are not so girted there are plenty of chesp illustrated person. It is a very attractive kind of over, and keeps a young lad from going out evenings where he would probably get into be decompany.

Soft woods are best for children to work and, and white pine are used, and may be stained if desired. The design is first marked with pencil on wood which has an elever and more than one cravaged the defence were straightened, and as Ottoman and was made and the pattern prominent as a sat raised. It is a slow, but very faccinating first, and many a lad does earn a nice little or an east are required to be low are cent or the Straits, and until after Russia conquered a firm foothold on the shores of the Extraits, and until after Russia conquered a firm foothold on the shores of the Extraits, and until after Russia conquered a firm foothold on the shores of the Extraits, and until after Russia conquered a firm foothold on the shores of the Extraits and, encountering a small Ottoman and the precipital scale, and the protection and the protection and the protection of the Venetian power the defence were such pattern prominent as a state of the protection of the Venetian power the defence when the defence were such a firm foothold on the shores of the Extraits and, if certain termis should not was supreme and undisputed in the Black Sca. Among the winter by working and the protection of the venetian power the defence were the defence were the defence when the defence when the defence were the defence when the defence wh

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