## AGRI-HORTICULTURAL DEPARTMENT.

Skeleton Leaves.-At a recent meeting of the Scientific Committee of the Royal Horticultural Society, Mrs. Cussons, of Southport, exhibited some skeleton leaves, and with them sent the following note : "For the dissection of leaves I find the process of maceration too long and tedious, to say nothing of the uncertainty as to the results. I have therefore adopted the use of alkali in saturated solution, the specimens to be introduced while the liquid is heated to the boiling point; the time of immersion to be regulated by the character of the various leaves and the nature of the epidermis to be removed. When the specimen is freed from epidermis and cellular tissue, it must be subjected to the action of chlorine to destroy the colouring matter. The introduction of peroxide of hydrogen not only serves to render the lace-like specimen purer in colour, but also preserves it. In destroying the colouring matter in ferns this also is invaluable; added to the chlorine, it gives a solidity to the bleached fronds, and appears to equalize the action of the chlorine. For skeletonizing capsules the slow process of maceration by steeping in rain-water is alone available ; a moderate heat may be applied to hasten the process, but alkali is useless. The only known flower. which can be dissected is the Hydrangea japonica. The fibrous nature of the petals renders it easy to skeletonize in the perfect truss in which it grows. Skeletonized leaves and capsules appear to gain in the process a toughness and durability not possessed by them in their natural state."

Utilization of Suint.-One of the most singular discoveries in the history of agricultural chemistry is due wholly to the French. Sheep draw from the land on which they graze a large quantity of potash, which is eventually excreted from the skin along with the sweat. It was shown by Chevreul that this peculiar potash compound, which is called suint, forms at least one-third of the weight of raw merino wool, while it constitutes about fifteen per cent. of the weight of the fresh fleece. As it is easy to extract the "suint" by mere immersion in water, the wool manufacturers can readily produce more or less concentrated solutions, from which the potash may be recovered by appropriate treatment. The development of this new industry is principally due to MM. Maumné and Rogelet, whose process, in operation at most of the great seats of the wool manufacture, is very simple. They evapo rate the solutions to dryness, and place the residuum in resorts, and distil it very much the same as coal is distilled at gas-works. The result is that while much gas is evolved which can be used for lighting the factory, and much ammonia is expelled which can be collected and used in many ways, there remains a product consisting of carbonate, sulphate, and chloride of potassium These salts are separated by the usual method, and pass into commerce.

Chloride of Potassium for Sheep.-The use of chloride of potassium is recommended in Germany as a means of increasing the growth of wool in sheep. The fact of the "yolk" of sheep containing a large proportion of this chemical led some German chemists to make experiments with a view of proving whether the supply of this material would promote the growth of wool; and the result has proved that, by administering chloride of potassium in the proportion of one part of chloride to nine parts of salt, the production of wool may be increased and its quality improved, while the general health of the animals is at the same time benefited. Experiments are being made in order to ascertain the proper quantities to administer.

## MUSICAL.

Mr. Mapleson is going to take a new departure, and show the Americans something of English enterprise, by bringing to this continent, not only a frrst-class troupe of artists, but
the Conductor (Signor Arditi) band and chorus of Her Majesty's Opern House, London. The the Conductor (Signor Arditi) band and chorus of Her Majesty's Opera House, London. The list of artists includes Miss Minnie Hauck, Mlle. Bauermeister, Signor del Puente, Signor Campanini, and Signor Foli, and it is intended to produce M. Bizet's new opera of Carmen" in the New York Academy of Music, with the original London cast.

Now, we are not all envious of our cousins, in New York, nor are we so covetous of our neighbours' good fortune as to desire "Carmen" to be produced in Montreal instead of New York, but we are not above partaking of the crumbs from the rich man's table, and we zoould like to hear a few of the artists who are coming so close to our city, even without their band or chorus. Surely when Mr. Mapleson shows sufficient enterprise to bring such a vast atray of talent over 3,000 miles, and maintain them at enormous expense during thirty performances on speculation, we ought to be able to offer sufficient inducements to secure a portion, at least, of this "glorious company" for a few days !

We do not want to hear "Carmen," or "Lohengrin," or any of the latter-day novelties; any opert, well performed, would satisfy us, and would be a novelty in Montreal. We think heir company can possibly be said to have some remote commection, and thus show with music.

## DR. MACLAGAN'S ORGAN RECITALS.

The first of these recitals was given in Zion Church on Monday evening. The audience was not very large, but we could hardly expect that it should have been, so many people ing out of town.

The first piece on the programme was a Fantasia in C minor by Hesse, which was admirably executed, but without the slightest attempt at expression. It was followed by a well written Andante by Smart, but neither of them seemed to impress the audience very much. After this came a Selection from "Dircorali," which took them completely by storm, and received tremendous applause. Then we had one of Bach's Fugues, and an
acrobatic performance in which a Christmas Hymn was twisted into every conceivable shape, acrobatic performance in which a Christmas Hymn was twisted into every conceivable shape, the whole concluding with the Coronation March from "Le Prophete."

We must not forget to mention the inevitable Andante in G by Batiste (which was, as usual, encored) ; also, the vocal solos by Messrs. Trotter and Redfern, which were well received.

While we must admit that Dr. Maclagan played, as far as mere execution is concerned very well; and that there was much to admire in his performances, we would remind that gentleman that a mere mechanical performance of difficult pieces on the organ is not necessarily organ music, and would recommend him to take for his models such men as Best, Stainer or Archer, who have made their reputation, not merely by executing difficult pieces in an inane way, but by an intellectual interpretation of the woiks of the great masters.

These recitals might be made a means of education for the masses, if, instead of the florid and meataingless variations of Batiste and Wely, we had some of the music of Beethoven and Mendelssohn. True, we were treated to two fugues, one by Bach and the other by Hesse, but fugues are calculated more to show dexterity of the performer than to move the hearts of an aucience, which, we take it, is the true office of the musical artion.

We hope Dr. Maclagan will take these remarks in all friendliness, as they are made

THE OLD ORGANIST.
Tis forty years ago since first
I climbed these dusty, winding stairs
To play the Dean in; how I spurned
Beneath my feet all meaner cares.
When frrst Ieant; my cheek on fire,
And looked down blushing at the choir
Handel and Haydn, and MozartI thought they watched me as I played
Whe Palestrima's stern, sad face
Seemed in the twilight to upbraid
The ghost-hands of past centuries.
Brhind my oaken battlement
Above the door I used to lean,
And watch in puffing crimson hood,
Come stately sailing in the Dean
On this, the organ breathing low,
Began to murmur soft and slow.
I used to shut my eyes and hear
The solemn prophecy and psalm
Before the prave ; and 1 loved
Till, like a preayer the lull and calm
Broke forth brave Purcell's "
Broke forth brave Purcell's " Oh, give Thanks."

knew those thirteen hundred pipe<br>And thirty stops, as blind men do<br>The bird's song, and the thurder,<br>The bird's song, and the thunder, too<br>Like storms upon a rocky shore<br>And now to-day I yield me up<br>The dusky seat, my old loved throne,<br>Unto another; and no more<br>Shall come here in the dusk alone, Or in the early matin hour,<br>. hear my old freend's voice of power:<br>and yet methinks that, centuries hence,<br>Lying beneath the chancel floor,<br>In that dark nook I shall delight<br>And to myself shall quietly smile more,<br>When music floods the vauly smile<br>Or, mocking gravely at some hand<br>Less skillful then my own was once<br>In my snug nest I'll lie, and mark<br>The blunders of the foolish dunce;<br>But to myself the secret keep,<br>And turn me round again to sles.

## BEETHOVEN.

When Steibelt, a pianist and composer of note in his day, came with his great celebrity from Paris to Vienna, several of Beethoven's friends were afraid that the reputation of the party given by Count Fries, where Beethoven introduced they met, for the first time, at a clarionet, and violoncello (op. 11). The performer has no peculiar in B hat, for pianoforte, this piece. Steibelt listened to it with a sort of condescension opportunity for display in pliments, and thought himself sure of his victory. He played a puintet of his a few comtion, extemporized, and produced much effect by his tremolando quite novel. Beethoven could not be induced to play any more. passages, which were then. Fries gave another concert. On this occasion Steibelt played a quintet ath rward Count and a brilliant fantasia, which he had evidently got up-on que same with great success, impregno), on which the variations in Beethoven's trio are written. This propria ch' admirers of Beethoven and the master himself ; they insisted on his sitting down to ined the He went to the instrument in his usual, I may say, uncouth manner, as if he was to improvise. and, as he went by, took up the violoncello part of Steibelt's quintet, laid it (purposhed there, down on the desk, and, with one finger, strummed a theme out of the first (parposely) upside on he became so enraged and excited in his improvisation that Steibelt left the rom he went Beethoven had done-never would meet him again, and made it a condition that any one wishing for his company should not invite Beethoven.

Certain critics in Paris claim that the new two-manual pianos recently exhibited in Paris will supersede those now in use. In the two-manual instrument two grand pianos are placed one over the other, and in the top piano the manuals are reversed, the bass notes being where-
the trebles usually are, and zice versa. Thus the performer can play without crosing the trebles usually are, and vice versa. Thus the performer can play without crossing his
hands, and can play bass or treble, as the case may be, on the two pianos simultaneously

## CURRENT LITERATURE.

## Harper's Monthly Magazine for September.

Harpers' are almost invariably first in the field, and the present number well sustains. their old-time reputation. The contents are varied enough to suit all tastes, and the illustrations are of even more than usual merit. There are two articles which are especially interesting to Englishmen : "Sheen the Benutiful," hy Miss Clara F. Morse, with its 13
illustrations of Richmond Hill, Twickenham, and other illustrations of Richmond Hill, Twickenham, and other scenes of historical interest; and a charming paper on "Thomas Bewick," the father of English wood engraving; here we have
a portrait of Bewick, and reproduced with great skill a profusion of engraving from his a portrait of Bewick, and reproduced with great skill a profusion of engravings from his
"British Birds and Quadrupects," (many of those who visited the Caxton Exhibition in this British Birds and Quadrupeds," (many of those who visited the Caxton Exhibition in this
city will remember that a copy of this very scarce book was shown,) we may city will remember that a copy of this very scarce hook was shown,) we may say with Words-
worth that we look at them with "ever-recurring "The Reformed Wieshaden," and still another, a pleasant there is an illustrated article on "The Reformed Wiestaden," and still another, a pleasant gossip on a "Spring Jaunt in Staten sliand. The number is filled with portions of the serial stories, "Macleod of Dare," stories; also three or more poems-in fine, it is an exceedingly rich and beautiful number.
Evolution-The Stone Book, and The Mosaic Record of Creation. By Thomas
Cooper. Dawson Brothers, Montreal.
It is refreshing to turn from that strangest of all tongues, the language of the so-called sensational novel, to the idiomatic English of Thomas Cooper. The author has a knack of putting odruths in new lights, and of enforcing and illustrating his arguments, which renders shrewdness and ordinarily attractive. In this little volume miracles are discussed with shrewdness and a homely directness of argument. It is a model of vigorous thinking and effective eloquence. Our author tells us that it contains the substance of three lectures which have been spoken in nearly every town in England. Thomas Cooper is a man of remarkable powers, and has had a remarkable history. The writer of these lines knew him as a Physical Force Chartist in 1840, and from that date he suffered two years' imprisonment for his political opinions. His conversion has been so complete that he has lectured against striking a blow even in self.defence; and at this time he is a hearty septuagenarian lecturing on "Christian Evidences" with a strong common sense which has seldom been equalled. The present volume is the fifth of the "series," and is worthy of the man. It is a book which earned men may read with advantage. The "Record of the Creation" in the third lecture deserves to be scattered as men fing seed into the furrows.
holman liver pad co., zor Notre Dame street, Montreal.
DEAR Sirs - By the advice of my friend, Mr. Inglis, of your city, you sent me a "Holman Liver Pad"

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Travel, covering all accidencs by land or water- or Catal or nondatal is now issung Policies and Permits for



