

THE NEW MONTREAL HARBOUR DREDGER.

The extensive work of remodelling and enlarging the Barbour of Montreal and protecting the city from winter Boods, recently determined upon, requires important additions to the Harbour Commissioners' working plant. The first in is the powerful dipper dredger illustrated on page 389. The dredger is adapted to working in depths to 411/2 feet, and in the hard pan and limestone shale, as well as in the tofter materials met with in the bottom of the harbour. The bull is 90 feet by 36 feet by 91/2 feet overall, and is fitted with. With two spuds, or anchor posts, 3 feet square by 60 feet long, and one of 2 feet square and the same length. In order to noid the weight and wear of chain and multiplying blocks, be bucket is worked by a single purchase wire rope, leading direct to the machinery, which is therefore of unusual thength and double geared. The main drum for receiving the tope is made conical in order to give the buckets ample Wer while cutting, and high speed when merely lifting. The drum is driven by double frictions, which are controlled by a steam compressor. The main engines are double, with Splinders 16 inches diameter and 18 inches stroke. A pair fengines swing the boom, and another pair work the backing chain and the four deck winches. The dipper handle is bed by a steam friction which with the swinging and back-Reting driven by the main engines. The after spud is a ball. This one, and is made to take its step forward and backby a steam cylinder. The boom is of steel, and is 50 tin length. The bucket is 4 1/4 yards net capacity, and the tel rope which works it is 2¹/₂ inches in diameter, and of tons breaking strength. The working rate in dredging Ordinary hardness and to 35 feet in depth averages a the det a minute. The dredger was designed by Mr. Kenbuy the Chief Engineer of the Harbour Commission ; the and part of the machinery were built by the Commiswe part of the machinery were built of the machinery by the built of the engines and main machinery by the built by Mr. Brush, The S.S. & Dredge Co., and the boiler by Mr. Brush, Montreal. The Commissioners are further increasing by the additition of a second dredger of the same the pression of a second devices of the second devices of the second devices by Messrs. Carrier, Laine & Co., of the second devices by Mr. and also three floating and two land derricks by Mr. tenous and also three floating and two land defined of this dredge is form a float of Montreal. The engraving of this dredge is the float of M. Nelson, Assistant Engineer. a photograph taken by Mr. J. M. Nelson, Assistant

THE HAMILTON S. P. C. A.

The Hamilton Society for the Prevention of Cruelty to als was established in April, 1887, and since that time the been active and productive of great good in the direction of kind. **W** kindness to animals. They have an executive committee **W** prom: prominent people, together with a president, vice-presiat and secretary-treasurer. Mr. Adam Brown, ex-M.P., press President, Mr. Charles Black, vice-president, and Major MacLaren, secretary-treasurer. The society has an ector, whose duty is to keep a watch on all cases of warn the parties, and, where warnings are unheeded, on them before the magistrate. It is somewhat rethe before the magistrate. It is some the before the magistrate. It is some the before the society has been the in the lessening of cases of cruelty in Hamilton and the lessening of cases of crueity in transmission of en-thourhood. In addition to their many methods of en-Ouring to inculcate kindness to God's dumb creatures, offer prizes annually for the best cared for cab and cart The competition for 1891 was held in Hamilton on We give The officers of the We give a view of the prize cab teams. The officers of the indges in the competition, by, members for the city, judges in the competition, are in the foreground. We are unable in this issue to the view of the prize cart horses, but their condition the clearly, as in the case of the cab horses, that their where kind-hearted men, and took care of the animals b did so much for them. This is a practical way of teachthe kindness to animals, and well worthy of imitation by the societies. The photograph is by Cochrane, of Hamil-

MR. J. ISRAEL IARIE, M.T. J. Israel Tarte, M.P. for Montmorency, to whose Persiste the McGreevy affair in parliament, was born at Boorais D. J. B. D. in 1849. He received ent determination is due the revelations in connection Berthier County, P.Q., in 1849. He received

his education at the College of L'Assomption. He studied law and practised as a notary for two years. With a decided taste for journalistic pursuits he abandoned his former profession, and since 1874 has been edi or of Le Canadien. Mr. Tarte is thoroughly versed in the provincial politics of Quebec, a, apart from the knowledge a journalist invariably gains, he sat in the Legislature for four years-1887 to the end of 1891-as member for Bonaverture. He retired to enter the wider fie'd of Federal politics, and was returned to parliament at the last general election In politics he is a Conservative.

PAPER CHATS.

OME and let us talk

about sermons.

There are sermons

and sermons. Some-

times I think the

preachers might

save their time and

their lungs and yet

give far greater satis-

faction. There is one

point which but few



clergymen seem to have studied, viz., the ability to put into few words a large amount of matter. I listened lately to two sermons which brought these reflections very vividly to my mind,-they being so diametrically opposite. A young clergyman, just commencing his work, took a very short text, and from that text-its chief point-a virtue all should aim to attain. He preached for perhaps fifteen minutes, and in that time managed to make his meaning perfectly plain. He took no impossible standards, but just pictured every day life, and the various modes of practising that particular virtue. He wasted no words-using no "vain repetitions." I came across many of the congregation afterwards, and all were satisfied. As for me-who had listened to myriad sermons, dull and brilliant-I felt that I had listened to something different-something refreshing. No astounding eloquence-no straining after effect, but a good, honest discourse which all could readily understand. I hope this young clergyman will continue as he has begun. He will thus do much good, besides saving himself from looking down upon a congregation which would ofttimes resemble a yawning gulf were it not for the usages of church etiquette !

Now here is another sermon I heard, and it was preached by a really learned man, of high attainments and deep research. He took a well worn text-perhaps the one more descanted upon than any other. Well, he literally chased this text up and down, in and out, round and round ! He recited it-then got himself tangled up in it-caught at it again. Sometimes he seemed to have really settled down to say something connected about it-then apparently lost sight of it again, and so again recited it until it almost gave me "pins and needles" (we all know that old malady?) to sit and listen to him. My received impression was that he had not the subject well in his own mind, and thus had to repeat the text over and over in order to fix it there ! After a long chase he came back to just where he started, and the only point which I and several others gathered was that it is rather the best thing to be a little wicked (sometimes a great deal) because it brings so many benefits when one turns about (tired of being naughty) and gets good again ! When this sermon was at last finished there was a look of relief on many faces (I'm sure there must have been on mine) and an elastic swish of jumping up from seats, which was eminently suggestive.

I have often pondered upon sermons, but listening to these two-so lately-my ponderings seemed to gain a fresh impetus. Why do not those who are studying for the church more often cultivate a clear and direct style, and preach oftener upon some special characteristic, some practical virtue which we need in our daily lives, instead of so much (attempted) expounding of texts which-I hope I may be pardoned for saying—I don't think many clergy. men exactly know themselves? It is all very well for some of the older generation to say, "You should remember you

are at church, and not allow yourself to get sleepy and cavil at the style, &..., &... Enquiring minds will not submit to this. No great oratory is needed. It would be hard indeed if the church were to be deprived of earnest and useful workers because the gift of a charmed eloquence was not in them, but I firmly believe that if a good man of fair average ability thoroughly knows his theme and what he wants to say about it, and then endeavours to clothe it in few words-but all to the point-he will command the attention and respect of his congregation. The churches are largely composed of the ignorant and thoughtless, and also of those whose time is much occupied. There are but few who are able to follow out the intricate doctrinal questions so often propounded in the pulpit. What is wanted by the majority is something to guide-something to rest upon.

I have in this paper alluded to the average sermon. I have frequently listened to a sermon over an hour long with no feeling of weariness, but why? The preacher was of exceptional eloquence and could keep his hearers' attention for longer yet if he so willed. I have observed, too, that even these gifted preachers confine themselves more usually to some familiar, understandable text treating of a special virtue to be daily practised, rather than to one with a deep and hidden sea of meaning into which so many hopelessly immerse themselves, drugging their hearers with them.

F. J. M.



OLD SUN-DIAL IN BARRACK-SQUARE, FORT LENNOX, ISLF-AUX-NOIX.

The Exiled Acadians.

Nearly everyone has placed the site of the old Acadian village of Grand Pre and Basil's blacksmith-shop nearly opposite to Long Island. About two miles west of modern Grand Pre Mr. W. C. Archibald, while cutting away a dry sandy knoll, came suddenly, evidently, upon the remains of what was supposed to be an old blacksmith shop. The land is alluvial, and there was at least four feet of soil over it, which must have taken many years to be deposited there. The hill is of sand, but the floor is of clay, beaten so hard that Mr. Archibald had to loosen it with a plow before the scoop would fill. There were also two cartloads of foundation stones, slate and granite, some of which were very heavy, weighing about 150 lbs. Mr. Archibald has also in his possession several pieces of charcoal which were found on the site. Some twelve years ago, while excavating about two rods from this place, Mr. Archibald came upon the foundation of a house, near which was a heap of slag, such as will be found near a forge. From this it seems that a blacksmith lived here and that this was the central part of the village west of Grand Pre. - Wolfville Acadian.

----Lower Canadian Manor Houses. ERRATUM.

By an unfortunate mistake a wrong title was given to engraving of Manor House shown on page 395. Instead of "Pointe Platon," it should read, "Deschambault Manor."