

The first idea of a steam engine in England was in the Marquis Worcester's "History of Invention," A.D. 1633.
 In 1701, Newerman made the first engine in England.
 In 1764, James Watt made the first perfect steam engine in England.
 In 1766, Jonathan Hulls first set forth the idea of steam navigation.
 In 1778, Thomas Payne first proposed the application in America.
 In 1781, Marquis Joaffrey constructed a steamboat on the Saone,
 In 1781, two Americans published a work on it.
 In 1789, William Symington made a voyage in one on the Forth and Clyde Canal.
 In 1802, this experiment was repeated.
 In 1782, Ramsay propelled a boat by steam at New York.
 In 1789, John Fitch, of Connecticut, navigated a boat by a steam engine on the Delaware.
 In 1794, Robert Fulton first began to apply his attention to steam.
 In 1783, Oliver Evans, a native of Philadelphia, constructed a steam engine to travel on a turnpike road.
 The first steam vessel that ever crossed the Atlantic was the Savannah, in the month of June, from Charleston to Liverpool.—
 'Hunt's Merchants' Magazine.'

THE INVENTOR OF THE WHEELBARROW.

It takes a great man to do a little thing sometimes.
 Who do you think invented that very simple thing called the wheelbarrow? Why no less a man than Leonardo da Vinci.
 And who was he?
 He was a musician, poet, painter, architect, sculptor, physiologist, engineer, natural historian, botanist, and inventor—all in one. He wasn't a "Jack at all trades and master of none," either. He was a real master of many arts, and a practical worker besides.
 When did he live?
 Somewhere about the time that that Columbus discovered America.
 And where was he born?
 In the beautiful City of Florence, in Italy.
 Perhaps some of you may feel a little better acquainted with him when I tell you that it was Leonardo da Vinci who painted one of the grandest pictures in the world—"The Last Supper,"—a picture that has been copied many times, and engraved in several styles, so that almost every one has an idea of the arrangement and position at the table of the figures of our Lord and his disciples; though I am told that, without seeing the painting itself, no one can form a notion of how grand and beautiful it was.
 And only to think of the thousands of poor, hard-working Americans who really own, in their wheelbarrow, an original "work" of Leonardo da Vinci!—St. Nicholas.

CHURCH MUSIC.—PALESTRINA AND THE SIXTINE CHAPEL.

It cannot be doubted that from the very first the Church has made use of song in her offices. St. Basil and St. Augustine both assert the fact in their letters; and, before them, St. Paul wrote to the Colossians—"Doceat et commonet vosmetipsos psalmis, hymnis, et canticis spiritualibus, in gratia cantantes in cordibus vestris Deo." Brossart affirms that at the end of the second century the Christians of Bythinia sang together in chorus; and St. Gregory Nazianzen speaks of singing as already established in the Church at his time.

The ancient Romans, being engrossed with war and the desire of conquest, gave but little attention to music or the sister arts, painting and sculpture, but contented themselves with adopting that of the Greeks, which being, therefore, in use at the time of the foundation of Christianity, was the first accepted by the Church. It is easily understood that the Christians of the first three centuries, hiding in the Catacombs and laying down their lives by thousands, made use of the most simple melodies, singing together in unison. Thus it may be said that, like the Church, the divine art of music lay hidden for a while; though we cannot doubt that the Christians found consolation in singing together, following the injunctions of the Apostle St. Paul. After three centuries of persecution, with the accession of Constantine to the throne, came a day of triumph, when the Church, issuing from the Catacombs, was exalted before the whole world, and then it was that music began to progress. It appears, however, after a time, to have deteriorated and fallen away from its first simplicity, when in the fourth century St. Ambrose appeared, with his sublime genius, ardent affections, and rare piety. He could not endure that the worship of God's house should be spoiled by trivial and profane melodies. Accordingly, the holy archbishop set about improving and reforming the Church music in his own diocese. By many St. Ambrose is looked upon as the inventor, of chanting, according to the diatonic method of the Greeks. However this may be, one thing is most certain, that he reformed, improved, and perfected it, not only at Milan, but also at Florence and divers other places, till by degrees his influence became felt throughout the whole Church.

Although at the first no musical instruments were permitted during the Divine Office, yet it is known that later on St. Flavian at Antioch, St. Chrysostom at Constantinople, and St. Ambrose at Milan admitted the use of instruments, which became universally adopted. It is true that St. Athanasius forbade them at Alexandria, yet the general testimony of history goes to prove that the Fathers of the Church only opposed the use of instruments when,

from a help to devotion, they degenerated into a profane distraction. One thing is abolishing altogether and another circumscribing within due bounds. The latter would seem to have been the custom of the Church in all ages.

Two centuries elapsed from the reform of St. Ambrose to that of St. Gregory, during which the Ambrosian method continued to be followed. St. Augustine, whose vast and comprehensive mind embraced so many subjects, wrote a treatise on music, in which the principles were the same as those of the Greeks, followed by St. Ambrose. It appears, however, that little by little practice and theory became so separated that church music no longer, as at the time of the Bishop of Hippo, helped souls to piety, like that of which he wrote, saying—"The voices penetrated my ears, the truth my heart, and sweet tears of devotion flowed from my eyes."

But in the sixth century appeared a vast genius, the vigor and energy of whose great soul were directed to remedying all abuses, and among others those into which Church music had fallen. This was Pope Gregory the Great. With him originated the mode of chanting called in England Gregorian, in Italy "Canto fermo," in France "Plain Chant," and in Germany "Canto Corale." The most important change made by St. Gregory was the substitution of the Latin letters for the Greek. Kalkbrenner, in his "History of Music," tells us that in the year 594 Pope Gregory made three octaves of notes, signing them with the Latin letters—the first octave with capital letters, the second with small letters, and the third with small letters doubled. Besides this, St. Gregory founded two schools of music, and endowed them with necessary funds, securing to the pupils instruction not alone in music, but in literature and science. From this institution the famous Papal Chapel in Rome took its origin.—'London Weekly Register.'

Correspondence.

(We are not responsible for the opinions of our Correspondents.)

AN INJUSTICE.

To the Editor of the NEW ZEALAND TABLET.

SIR—I beg you will be good enough to allow me a small space in your valuable journal to make a few remarks on the past management, I should say mismanagement, of your Police Force under present administration. And now that a new Commissioner is appointed to the command of the whole of our Police Force in New Zealand, it may not be out of place to point out to him and the general public of New Zealand the gross injustice, nay the grievous injustice, and painful insult, that has been offered to, and inflicted upon the Roman Catholic members of the Otago Police Force.

First I would point out that since the Police Force of Otago was organised by the late Mr. St. John Branigan in 1862, up to the present, there have been no less than thirteen sergeants promoted to the rank of Sub-Inspectors and Inspectors. In Mr. Branigan's time six were advanced to the higher grades, viz., one to be Commissioner of Police in Southland; one Inspector, and five Sub-Inspectors in Otago, also one chief clerk to be R. M. on the gold-fields, and four clerks were also appointed by him to his office, and one Sergeant was appointed as Master of the Industrial School at Lookout Point; and under the present administration five Inspectors and one Sub-Inspector have been appointed, also one Sergeant has been appointed as Master of the Industrial School, and one as Master of the Benevolent Institution, Caversham. Now the painful part of the case comes to be stated, viz., that although the Police Force of Otago were, and I think still, are composed of more than one half Catholics, yet not a single Roman Catholic member has been advanced to any higher grade than that of first-class sergeant during the last fifteen years. Is this dealing out justice and fair play, or is it not a gross injustice as well as a deep insult to the feelings of the Roman Catholic section of the service? Nay is it not an insult offered to the Catholic community at large?

Now, Sir, I would respectfully point out to the public what the Police Regulations, pages 11 and 12, say on promotion—"All vacancies in the ranks above that of constable and up to, and including that of Inspector, are filled up by promotion from the next inferior in rank, every inducement is held out for men of good class to enter the Force, and to exert themselves while in it. For by zealously and efficiently performing their duties to the public they are consulting their own interests." Then it goes on to say that those desirous of promotion must endeavor to merit it by zealous attention to duty. Page 12, where it speaks of rewards, &c., it goes on to say, "While to the Constable who is not only well conducted, but also thoroughly efficient, an additional reward is offered in the chance of promotion to the higher ranks, which, as before stated, are open to every member of the Force." Such are the promises held out to each man. But I would ask are those promises fulfilled fairly and impartially. I should respectfully submit they are not when it is considered that the Otago Police, as before stated, are composed of more than one-half Roman Catholics, yet that they have been studiously and carefully excluded from promotion to the higher ranks, and from all places of emolument during the last fifteen years. I should ask if they have not a just cause to complain, and to wish for a change in the administration of the Police Department, when it is taken into consideration that Otago is the only Province in New Zealand where such a state of things exists. I may add that such a state of things does not exist in any of the Australian Colonies. I would respectfully submit that such a thing is a shame and a reproach to the management of the Otago Police Force, and the sooner we have a change in the administration of our Police the better.—I am, &c.,

Wellington, Jan. 3, 1877.

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