

I have one more word to say. The spiritual nature of man is his soul. Mind is of the spiritual nature. The soul, being simple, is essentially indivisible. Therefore, mind and soul are one and the same thing. We only consider the soul in its different faculties when we say mind, intelligence, memory.

If this mind, which is a faculty of the soul expressing itself in the body, then soul and body are identical. If soul and body are identical, parents propagate the soul as well as the body. But this is a heresy, as St. Thomas Aquinas teaches. For as I have said repeatedly, God creates immediately the soul of each individual man.

Dr. Howard may stick to his position if he pleases, but he does not see the peril. Tertullian, Appollinaris and some Eastern authors taught that the soul was propagated in the same manner as the body, and were condemned for it.

As to the bearing of railroads upon the question, some might think it rather remote, not to say hazy. Perhaps the Doctor was joking, and wanted to argue that there is no difference between steam and the engine, or that the passengers and the train are identical.

The Doctor says I want to have, and am welcome to, the last word. Well, he who hits last generally wins the battle, and the decision I leave to the judgment of intelligent persons who have followed the controversy. He is a prudent cavalier who stops his horse on the edge of a precipice.

With the best of good will to the Doctor, and many thanks to you, I conclude.

G.

The following is a list of the officers who have sailed for Natal in command of the

21ST ROYAL SCOTS FUSILIERS:

Lt-Col William Pole Collingwood.

Majors Arthur G. Hazlerigg, Richard W. G. Winsloe.

Captains E. T. Bainbridge, Wm. Thorburn, F. McK. Salmond, F. W. Burr, C. B. Robinson, E. C. Browne, J. N. Tew, R. F. Willoughby, J. M. Gordon, T. Auchinleck.

Lieutenants A. C. Dunn, A. L. Falls, F. R. H. Lambert, A. S. Justice, W. M. Duckett, H. R. Alexander, A. W. Collins, J. H. Scott-Douglas, S. F. Chichester, P. W. Browne, C. F. Lindsell, W. A. Young.

Sub-Lieutenants J. D. Aird, Hon. Arthur S. Hardinge, R. W. Blake.

Adjutant J. H. Spurgin.

Quartermaster James Clifford.

Col Collingwood, Majors Hazlerigg and Winsloe, and Capt Auchinleck are the only officers who have any war services.

**Music and the Drama.**

Adelina Patti has a sealskin sash worth \$12,000.

Miss Adelaide Neilson writes from Nice that her pulmonary troubles have been much improved by the soft climate of the lively watering place on the Mediterranean. She will be back in London next week to begin rehearsals in the wonderful new piece we have been hearing of so long, to be produced at Easter at the Adelphi. Only just now, after months of talk about it, has the title come out. It is to be called "The Crimson Cross."

Boucicault's new version of "Pauline," under the title of "Spellbound," will be produced at Wallack's Theatre, New York, during the present month. Mr. Wallack will appear in the same character which he played at his father's theatre eleven years ago, and the heroine—then played by Rosa Eyring—will be entrusted to Miss Coghlan.

The slaying of a tiger, the shooting of a bear, and a duel across a table are among the quieter incidents of this drama.

**The Masque of Welcome—Brilliant Assembly—Grand Chorus—History of Canada.**

OTTAWA, February 24.—There was a large and brilliant audience at the Opera House to-night to witness the production of the Masque of Welcome. Every available seat was taken, and hundreds of people were turned away unable to obtain even standing room. In fact, the disappointed ones were so numerous that the management have decided to reproduce the Masque at an early day. The Governor-General and the Princess and suite were present, and from the hearty manner in which they applauded the several solos and choruses were evidently delighted with the entertainment.

The words of the welcome are by Mr. F. A. Dixon, and the music by Arthur Clappe, bandmaster to the Governor-General's Foot Guards. The piece is allegorical in character, illustrating the history of Canada. The scene opened with a sequestered glade in the woods. At the back is a miniature waterfall, splashing over moss-covered rocks, and on either side are trees, rearing their trunks amidst feathery ferns. A faint light, as of the Dawn, showed the form of an Indian Chief in war costume, during which the stage gradually grew light. The chief (Mr. Gourdeau), one of Canada's first tenets, then sang his plaint of farewell to the wood in the song "Sundown."

The Dawn of Colonization, as Indian maiden representing Canada, in a most elaborate costume, now entered, and sang a simple song, at the close of which she is frightened away by a number of backwoodsmen and trappers, who sang a song in praise of pioneer life.

A procession then entered, emblematic of the history of Canada, those participating being dressed in the costumes of those nations whose people have hewn down our forests and built up our cities. After these, were introduced the different Provinces entering into the Confederation. Quebec was represented by a lady habited as one of the old French noblesse, having embrodered on her robes the fleur-de-lis and lions of her escutcheon, and wearing a mural crown, as Ontario was represented by a lady dressed in white, with a cross of St. George and green maple leaves embrodered thereon, her head-dress being nuttural maple leaves and corn, emblematic of her agricultural wealth. British Columbia was represented by a miner, Manitoba by a trapper and hunter, Nova Scotia by a fisherman, New Brunswick by a lady dressed in sea-green and wearing water lilies in her hair, and Prince Edward Island by a sailor. A detachment of the G. G. F. G., and a squad of the Dragon Guards were present, and amidst martial music marched on the stage at the closing scene, where Canada tendered her welcome to the Marquis and Princess. The whole effect was grand. The words and music throughout are suitable to the figurative personages. The following is the song sung by Canada as her welcome is given:—

Royal lady, on our welcome,  
To reign to rule, kindly eyes,  
Loyal, loving hearts are beating,  
Neath its simple, homely guise,  
Leaving courtly phrase to others,  
We are simple, but we're true;  
Canada has one heart only,  
And that heart she gives to you.

Noble air, we hail you, lady,  
Loyal to the flag you bear,  
Nor where England's flag is waving  
Tide—'Let right be done!—is there.

Canada would not grow up  
Strong and straight as her own pines,  
With her name as clear, unaltered,  
As the sun that on her shines;  
Loved and loved by the nations,  
True and faithful she would stand;  
Never should her word be doubted,  
Nor dishonor touch her hand.

Guard her so, and she will bless you,  
And her children yet return  
In the after-day shall honor  
You, her Ruler, Lord of Lorne.

One hundred voices participated in the chorus, and at the conclusion, a bouquet was presented by a pretty little little girl dressed in white, and attended by twelve sweet little children, similarly attired. The Princess acknowledged the compliment by several graceful courtesies, amidst the deafening applause of the audience.

## ONE NON-CATHOLIC VIEW OF THE ENCYCICAL

(Catholic Review.)

The Encyclical Letter of Leo XIII. has been widely discussed in the secular and religious press of Europe and America. The tone of the comments and criticism, especially on the part of the journals which represent the highest and best thought on the side of Protestantism, is remarkable for the large measure of approval, and the respect shown for the points not approved. The London Spectator, which for upwards of fifty years has been a representative journal of power and influence, in a late issue has devoted two of its columns to a critical examination of the Encyclical Letter. As there is no reason to suppose that the editors could have any other motive to gratify than that of fairness and sincerity, the significance of the criticism demands attention. The Spectator says: "The manner as well as the matter of the Encyclical Letter from Leo XIII. to the Catholic Episcopate presents a striking contrast to similar documents from the pen of Pius IX. The ability of these latter was on the whole, under-rated in this country."

"This is, certainly, an important admission, and indicates very clearly that Protestants are slowly but surely beginning to see the truth that Pius IX. no nobody defended. Another extract shows this still more conclusively: 'The reasoning was often, given the premises, sustained and effective, and the attacks which were freely dealt out to the Pope's enemies had sometimes more point in them than the clumsiness of the form allowed to appear.' Having made these concessions, it was of course necessary to furnish some excuse why the truth was not apprehended earlier, and the best apology which could be brought forward appears to be this: 'The one conspicuous characteristic which diverted attention from everything else was their vituperative volubility. The vocabulary of the Pope seemed inexhaustible.' He who excuses accuses. It is gratifying to learn from this high Protestant source that the only objection to be urged against the warnings and instructions of Pius IX. is merely that they were too voluble and too vituperative. Probably the persons to whom our Blessed Lord, during His life on earth, found it necessary to address reproofs, complained of his 'vituperative volubility.' For example:

"Oh generation of vipers! How can ye, being evil, speak good things? . . . Woe unto you, hypocrites, for ye shut up the kingdom of heaven against men; for ye neither go in yourselves, neither suffer ye them that are entering to go in. Woe unto you, Scribes and Pharisees, hypocrites! for ye devour widows' houses, and for a pretence make long prayers; therefore ye shall receive the greater damnation. Woe unto you, Scribes and Pharisees, hypocrites! For ye compass sea and land to make one proselyte, and when he is made ye make him twofold more the child of hell than yourselves."

Probably in none of his discourses did Pius Nono use stronger language than this; probably the vipers and hypocrites to which it was addressed termed it "vituperative volubility." But, in the opinion of the Spectator, Leo XIII. is likely to avoid giving offence in matter of literary or rhetorical style. "The tone of the new Encyclical is throughout grave and moderate. There is no violence, no declamation, no appeal to Heaven to send down its fires upon a world which, in rejecting the Pope, has filled up the measure of its iniquity. On the contrary, there is throughout a careful avoidance of everything that can give offence." Pius IX. never invoked Heaven to send down fire on his enemies. He was, in spite of all the injuries inflicted upon him, singularly loving and kind to them. The Spectator, however, shows a desire to do justice to the ability and integrity of Pope Leo which stands in marked contrast with what have been the usual utterances of the Protestant press.

"Even the Socialists, to condemn whom is the declared object of the Encyclical, are condemned, so to say, with discrimination. The doctrines attributed to them are so described as to make it plain that the Pope has in his mind only the most extreme and consistent members of the sect. Leo XIII. is careful that there shall be no mistake as to what he means by Socialism. It is that body of doctrine which includes the rejection of marriage; the denial that either lawful inheritance or the labor of the lands, or the intellect, or frugal living can create a valid title to property; and the determination to enjoy, if possible, the goods of others during that short span of life which is all that man can enjoy here or hereafter."

It may be well to say that the hostile spirit of the Socialists is largely due to the persistent misrepresentation of them by the Protestant press and pulpit. There is no doubt that the broad, truthful, and conciliatory spirit of the Encyclical will exert a powerful influence even upon the minds of the Socialists.

The Spectator points out that: "The Encyclical really supplies to civil and political morality the argument which Mr. Mallock has lately been applying to personal and social morality. Whether Christianity be true or false, says Mr. Mallock, you will not get men to be good husbands and good fathers without it. Whether Catholicism be true or false, says Leo XIII., you will not get men to be good subjects and good citizens without it. In fact, though the language in which it is enforced is different, the argument of the Encyclical is precisely that with which we are so well acquainted in the discussions about Elementary Education."

The Spectator proceeds to say also that "the school will be no avail, the prison will be of no avail, if they stand alone. It is only religion that can teach men how to use the first to good purpose, and how to keep themselves from getting into the last."

It also remarks that the London Punch has misconceived the spirit and purport of the Encyclical when it represents in a cartoon Pope Leo and Bismarck as being agreed for once upon the necessity of putting down Socialism.

"That they both see in Socialism an enemy to be vanquished is of course true, but in this respect they are at one with nine-tenths of European society. It is not, however, this general and therefore meaningless agreement that is the distinctive or important feature of the Encyclical. It is really addressed to Prince Bismarck, and those who think with him, quite as much as to the Socialists themselves. The real drift of the Pope is not to encourage princes in putting down Socialism with the arm of flesh, but to warn them that the arm of flesh alone cannot be trusted to put it down."

There is of course nothing original or striking in these quotations, only so far as they represent the great and important fact that Protestants living in good faith are beginning to see and appreciate the truths and teachings of the Catholic Church. When the Pope can enable and powerful organ such as the Spectator freely and voluntarily, impelled by a sense of justice, acknowledging these truths, it is as pleasing to us as it is honourable to the editors of that journal.

## Catholic Items.

**PRESENTATION BY THE HOLY FATHER.**—The Holy Father has sent to the Rt. Rev. Bishop Chataud, formerly Rector of the American College at Rome, for the fair now being held in Indianapolis at St. John's Church, a silver statuette of the Madonna on a malachite base, copied from the statue of the Immaculate Conception in the Piazza di Spagna, Rome.

**CONVERSION OF A PROTESTANT MINISTER AND HIS FAMILY.**—From the Baltimore Sun we learn that Rev. Dr. Daniel Gans has resigned the pastorate of the Third Reformed Church in that city, and that he and his family are under the instructions for their reception into the Catholic Church. Dr. Gans has a son practising law in Baltimore, and his wife and daughters are preparing to enter the Church with him. His conversion is the result of twenty years' deliberation and study, during which he found himself gradually estranged from Protestantism and drawn towards Catholic unity.

**Cardinal Cullen.** Subscriptions to the Cardinal Cullen Memorial have now reached \$4,000, although the list has been open only two months. When there is a definite decision as to the shape the memorial is to take a fresh impetus will be given to the public generosity. We are glad, at all events, that Dublin, amongst its legion of statues, will have one of a Cardinal in robes.

**Lord Gower's Impressions of America.** Lord Ronald Gower has been giving his first impressions of America in *Vanity Fair*. It may be interesting to learn that he found all classes "not only civil, but highly civilized, as compared, class for class, with the English; not only amiable, but as a rule kind and courteous, and with rare exception, well informed, well bred, and having more refinement of manner" than any people among whom he had ever been. The courtesy, not an eye and lip civility, shown to ladies, struck him as in strong contrast with English grumpiness. His lordship's estimate of Americans is so high that we venture to say that even they themselves will blush like bashful maidens when reading their praises.

**Sunday Evening Concerts.** (London Free Press.) Sunday evening concerts are becoming more and more an American institution in New York. They have long been a German institution, invariably connected with beer drinking. There have been places in the city where one might hear good music and drink beer of a Sunday night without money and without price save the price of the beer. But at late it has been found profitable to give Sunday concerts in large halls without the accompanying beer. These are well attended, and orderly audiences sit through long programmes in which the best musical authors predominate. At first these concerts were called "Grand Sacred Concerts." Now the managers are dropping the title of sacred without changing in any way the character of the music. There are worse ways of spending a Sunday evening than listening to good music. [Yes, if no harm was otherwise done. What of the beer and other "institutions" allied to it.]

**Talmage on St. Valentine's Day.** The latest thing that the Rev. Dr. Talmage has looked at "from a religious standpoint," is St. Valentine's Day, with its "six million valentines fluttering in the excited grasp, and thirty million people wondering where they came from." The religious lesson is this:

"St. Valentine's Day cannot be spared from the calendar. No harm will come from earlier years' children receive. The valentines also has higher uses. There comes a time between 18 and 25 years of age, when one does not know exactly what is the matter. You get dreamy. You dare not write a letter expressive of your feeling, for you do not want to commit yourself, and at just that time the uses of the valentine come in."

This is sorry stuff; but it might have had some point if the reverend trickster had warned the hearers against ever sending a valentine begging or pledging bogus church subscriptions.

**Mottos and Nick-Names of the Regiments of the British Army.** The 29th are known as the "Saucy Worcesters." The 30th are the "Treble X's" (XXX). The 31st, the

"YOUNG HUFFS." once earned the good opinion of a General under whom they were serving. He cried out, "Well done, old Buffs!" "We are not the Buffs, Sir," was the reply. "Then well done, young Buffs!" was the dual response; and the "Young Buffs" they became. The 32nd Light Infantry feel proud of being known as "Corshimmen." Their heroic defence of Lucknow in 1857 will never be forgotten. The 33rd Foot wished to become known as the "Duke of Wellington's regiment," and he consented, but stipulated for a postponement of the naming until after his decease; the assumption of the title, therefore, did not take place until 1853. The history of the regiment tells, however, of an older and more familiar appellation, the "Havercake Lads," due to the fact that when first raised their recruiting sergeant was wont to march with an oat-cake impaled on his sword. The 34th are the "Cumberland Lads." The 35th gained their name of the "Orange Lilies;" from the colour of their facings, which years ago were orange.

**Progress of Catholicity.** A correspondent in Boston, who has recently visited East Cambridge and Cambridgeport, Mass., says that the progress of Catholicity in that quarter was a matter of great surprise to him. When we consider that at the beginning of the present generation Boston counted only about 100 Catholics, with only one priest, Rev. Father Thayer, a convert from Congregationalism, with only a few other Catholics scattered throughout the State of Massachusetts, while now we find the Diocese of Boston an archbishopric, with 310,000 Catholics, 176 churches, 213 priests, and a large number of hospitals, orphan asylums and free schools, the Diocese of Springfield, in the same State, with a Catholic population of about 150,000, 98 priests, and 86 churches, there is still greater matter for surprise. In the Diocese of Springfield, partitioned from that of Boston in 1870, and containing a Catholic population of about 150,000, there is a Catholic college, an orphan asylum, and about 4,000 Catholic children attending schools, chiefly under the care of the Sisters of Notre Dame, Sisters of Mercy and Sisters of Charity. The Sisters of Notre Dame, whose mother-house is in Cincinnati, have at least 7,000 children under their care in Massachusetts, chiefly in parochial schools, but they have also many flourishing academies for higher education, chief among which are, we believe, those at Lowell, Boston Highlands and Berkeley Street, Boston. There are besides in the Diocese of Boston three orphan asylums, a home for destitute children, an infant asylum, four hospitals, and a "Protectory" in care of the Sisters of Charity; a "Protectory for boys," in charge of the Brothers of Charity, a house of the Good

Shepherd in Tremont Street, Boston Highlands for Magdalens; a house of the Little Sisters of the Poor; and a hospital and home for destitute children, kept by the Franciscan Sisters. This is in a State in which the law to levy a tax on *everybody* for the support of the Protestant religion, was modified only as late as 1821! Truly, if the tyrannical Puritans who passed that and similar laws were now permitted to visit Massachusetts they would be surprised at the liberty of conscience now enjoyed, and the general progress made since Catholics began to gain an ascendancy in Massachusetts.

**Cutting Files by Machinery.** It was long supposed that no machine could be invented to cut files as well as by hand, but it seems that American ingenuity has solved the difficulty. Almost all the files made in the United States are cut by machinery, while Englishmen still stick to the old method. The result must be to give the American maker a great advantage in point of price, and as his product is good as well as cheap he must ultimately beat the Englishman.

**Lighting Houses by Electricity.** One of the practical difficulties in the way of lighting houses by electricity was obviated when the divisibility of the electric current was demonstrated by Edison. Before that time the electric light had been practicable, but the expense of an apparatus for each house forbade the general application of the system. One large machine can now be made to do duty for a considerable area, though not, as has been supposed, for a whole city. It is not economical to transmit powerful currents much beyond half a mile, and this fact will render it necessary to generate electricity in each city by many machines, each doing duty for one square mile. The only problem now remaining unsolved is how to make the electric light cheap: when Edison or some one else has succeeded, then we may hope to turn it on as we now turn on gas.

**Is the Moon Inhabited?** M. Flammarion, the great French astronomer, being desirous to test the truth of his surmise that there are inhabitants in the moon, proposes to construct a telescope of sufficient power to definitely settle the question. A committee has been organized to collect the necessary funds, the cost of the instrument being estimated at 1,000,000 francs. This will be the most costly telescope in the world, unless the American proposition to erect one on Pike's Peak at an expense of \$1,000,000 should be carried out, and it now seems probable that it may be. Four years will be required to complete the instrument, and if funds are provided there is no reason why it should not be completed. Its power would be sufficient to distinguish buildings of any magnitude, and to show the topography of the moon's surface.

**The Pedestrian Championship.** (New York Sun.) The match is exciting much interest up town. Harriman is freely backed by Mr. Walton of the St. James, who has made many bets of \$75 to \$100 on Harriman against O'Leary. Now he has drawn in a little, but authorizes Mr. Kelley to wager \$5,000 against \$10,000 that Harriman will lead O'Leary.

Messrs. Charles Rowell and John Ennis are expected here next Tuesday. Mr. Rowell, who is described as a manly, gentlemanly pedestrian, has no great published record. He started on a six-days' walk once, but stopped twelve hours from some mishap. He then went on the track again by request, and although he was fifth or sixth out of a dozen, he ended by taking third money, walking 470 miles, notwithstanding his twelve hours' withdrawal.

Harriman's best performances are 100 miles last year in 18h. 49m. 40s. He has no official record for this. But on making a heavy deposit that he would repeat the feat, the money was not covered. In the American Institute last May he gained a record of 160 1/2 miles in 34h. 29m., only taking one rest of seventeen minutes during that time. In Gilmore's Garden last October he walked 100 1/2 miles in 22h. 35m. 11s. In Buffalo one hot day last July he covered 100 miles without a rest in 20h. 43m. 41s. Last June he walked 400 miles in five days—80 miles each day.

John Ennis of Chicago has the reputation of being a fair long distance walker, the only trouble being that he is sometimes taken sick on the track.

It is understood, however, that the walk is to begin on the 10th of March. It is also believed that it will be a genuine contest, unlike the last two miserable struggles for the belt.

**Throwing the Shoe.** One of the best known customs connected with shoes is that of throwing them after a wedding party on their way from church or elsewhere. It is, say the authors of Lancashire Folk-lore, a relic of Anglo-Saxon or Danish usages of ancient origin. The Lancashire custom is to throw an old shoe on leaving the house to be married, as a preventive of future unhappiness, and an omen of good luck and prosperity. In Norfolk it is also the custom to throw the shoe after the wedding party on proceeding to the church. In Yorkshire, according to a writer in *Home's Table Book*, in 1827, there was a custom called "thrashing," which signified pelting people with old shoes on their return from church on the wedding day. "Thrashing" had at first some *raison d'être*, but as time went on this became forgotten, and the custom was indiscriminately practiced among the lower orders. The Kentish custom is for one of the groomsmen to throw the shoe, after which the bridesmaids run, she who gets it believing that she will be married first. She in turn throws it among the men, the man who receives the blow being also destined for marriage before the others. A custom not very dissimilar used to prevail among the noble Germans in the past. The bride on being conducted to the bride-chamber used to take off her shoe and throw it among those who were near, every one striving to catch it, and the successful one accepting it as an omen of his or her early and happy marriage. There is an old rhyme still extant, which gives a date to this custom of throwing shoes at weddings:

"When Britons bold  
Wedded on, the  
Sundays were backward thrown,  
The pair to tell  
Of their wedded bliss,  
The act was all their own."

This custom has of late been very generally revived, and is now as popular at fashionable London weddings as among our more superstitious country folk. A writer in an old number of *Notes and Queries* suggests that it was a symbol of renunciation of domination and authority over the bride by her father or guardian; and the receipt of the shoe by the bridegroom, even if accidental, an omen that authority was transferred to him. *All the Year Round*.

## Naturalist's Portfolio.

**THE ISLAND OF LOVELESSNESS.**—A new island has been discovered in the Polar Sea, northeast of Nova Zembla, and south-east of Francis Joseph Land, the northernmost discovery of the Austro-Hungarian expedition of 1873-74. Its precise locality is latitude 77 degrees 35 minutes North, longitude 86 degrees East, and it is about ten miles long, one hundred feet high and level and treeless. It was first described on September 3rd by the Arctic explorer and hunter, E. Johannessen, who called it *Islemløshed*, which means Lovelessness.

**SNAKES AND THE GERANIUM.**—In South Africa we are told the geranium has the reputation of being a guard against snakes, which, it is said, avoid the plant as though it were poisonous. We are reminded that though the flowers of the geranium are scentless, the leaves contain a quantity of volatile oil, with more or less pungent odour, and it is stated that no snake will come near a bed of these flowers. A resident in South Africa has surrounded his house with a cordon of geraniums, with the result that it is never visited by these unwelcome intruders. The discovery of this property in the geranium is attributed to the Kallias.

**THE CRAFTY HERMIT CRAB.**—There are many species of hermit crabs, those of the tropics being the largest and most handsome. This odd creature inhabits the shell of some mollusc in which it can retreat when threatened with danger. It usurps the deserted home of its vanishing mollusc, according to its size; when young and small it is found in the shells of the tops, periwinkles, and other small molluscs, and when it reaches full age it takes possession of the shell of a much larger mollusc, the cuttlefish, for example, and among other shells which it inhabits the variegated triton is known to be a favourite. The crabs are supposed to fight for the shell.

**SEA BEARS.**—The old "bills" have long course, almost bristly, fur on their neck and shoulders, which ruffles when attacked, and this, with their great teeth, gives them rather a formidable lionine appearance. These "bills" are savage, and so fierce that caution is required in facing them: they even are so bold as to leave the water and chase a man. One great and very old dark-coloured fellow, "king of a mob," was christened "Royal Tom," whose daring and dignity would barely allow him to move off when driven hard. On board the vessel which rescued the castaway survivors was a very large courageous dog, which would fasten on the parties, but get dead weight, and was no match in point of strength. Their tenacity of life is extraordinary. For instance, one received two bullets, had its head split open with an axe, and brain hanging out, but nevertheless dragged along the beach the men who were trying to keep him out of the water by hanging on his hind flippers.

Musgrave recounts the amusing manner in which the mother coaxes the young towards the water, which at first it is averse to enter, and she often displays ingenuity in getting it in. She puts it on her back, swims along gently, while the little bleating fellow slips or splutters off into the sea; the mother again gets underneath or even becoming angry, gives it a cruel bite or slap with her flipper. Ultimately, after such drilling, the youngsters take to the water of their own accord, and paddle about or play on shore in groups.

**THE EUCALYPTUS GLOBULUS IS IRELAND.**—The *WILLOW*, A. Co. Wexford correspondent writes: "I read lately an interesting paragraph in your naturalist's column, on the Eucalyptus Globulus, or blue gum tree of Australia, which well authenticated cases have shown to be a preservation against fever. It grows freely in the south of Ireland. Since the late frosts I saw it in Johnstown Castle demesne, 3 miles south of Wexford, where it was introduced by the Earl of Granard. The specimens there appear quite uninjured by the frost. Some are over 40 feet in height. One, standing between the mansion and the upper lake exhibits most luxuriant foliage and has been wonderfully rapid in its growth. The head gardener told me that he had raised plants from the home-grown seeds. A recent Catholic missionary in Australia states that there are at least two other varieties amongst the Australian mountains, attaining a vast size, quite hardy and possessing in an eminent degree that peculiar aroma which is supposed to be so decidedly antifebrile. Another recent traveller speaks of a specimen of the Eucalyptus in Victoria as being 380 feet to the first branch and 460 feet to the topmost twig. It may interest our correspondent to know that the anti-malarial properties of the willow, in some localities at least, appear to be quite equal to those claimed for the Eucalyptus. In the region of Asia Minor about Ephesus the prevalence of malaria has steadily diminished as the willow has been introduced. Thanks to the efforts of Mr. C. D. Van Lennep, Swedish Consul at Smyrna, this tree is now extensively grown in districts which were comparatively treeless twenty years ago. That it exerts some influence against the fever is probable; and that it strengthens the banks of the streams, furnishes excellent fuel, and supplies good material for farming implements is certain." (*Ed. N. P.*)

**THE DOMESTICATION OF ANIMALS.**—Professor Rolleston, Oxford, delivered an interesting lecture recently to the members of the Edinburgh Philosophical Institution on the "Domestication of Animals." In the first instance, he directed attention to the history of the ox, noticing briefly the different characteristics found in the wild and domestic species. Speaking afterwards of the pig, he showed, by reference to illustrations, how much this animal had become modified in its form and habits by domestication; pointing out the way in which the wild pig fed itself was exactly the way in which, after it was domesticated, it was not allowed to feed, and that while the pig in its natural state was furnished with a remarkably long and strong snout, by which it was enabled to dig up plants and otherwise supply itself with nourishment, the highly developed pig, as it now existed as a machine for manufacturing fat, was often unable to open its mouth sufficiently to feed itself, and had consequently to be supplied with its meat from a bottle. Altogether the manner in which the pig had changed its appearance indicated in a very remarkable way man's power of manufacturing, as it were, new species of animals. Speaking of the ox, the sheep and the pig as forming one group of domesticated animals the lecturer gave it as his opinion that it was one of those three animals that was first domesticated and used by man as a companion, and stated that one point of resemblance between them all was that they lived on uplands by preference at certain times of the year, and that there was a good deal to justify the belief that men living also in those uplands in early times domesticated those animals simply because they were convenient to his hand, otherwise it was quite conceivable that stages would have furnished a larger proportion of the animals domesticated than they did. Two birds, one of which was domesticated and the other semi-domesticated, the pigeon and the starling, had both, it was thought, become attached to man while he was mountain living, and had afterwards followed him to the lowlands in consequence of the advantages in the way of nesting which were obtained about houses. With regard to dogs, the Professor argued it was most likely that the first use to which these animals were put by man was the driving of wild cattle and other game into pits-falls, remarking that this theory would also explain the domestication of the ox, as the calf would be completely at the mercy of the hunter after the cow had fallen into the pit and would doubtless be thereupon reared in the hope of further profit. On coming to deal with the history of the horse, he said there was every reason to believe that Mongolians were the first to domesticate it, and further, that the first mention of it was of it occurred in Genesis in connection with the account of Joseph in Egypt. One important respect in which the horse differed from the ox, sheep, and pig, was that it was pointed out, that throughout its use by man it had changed only in a very slight degree. In reference to cats, it was mentioned that the Greeks and Romans in ancient times did not possess a cat corresponding in type with the cat of the present day, which had come from Egypt but used as a household animal, and for the same purposes a species of weasel, one proof of which was that the cat of those old times was written about as being guilty of the theft of honey, a theft which no cat would nowadays think of committing. In concluding, Prof. Rolleston stated that some writers had speculated as to whether, in the not distant future, the whole of the animal world, except the part which lived in the sea, would not be more or less brought into a condition of domestication. Some such course seemed in his opinion, inseparable from the progress of civilization, and this, he thought, was not to be regretted, as undoubtedly the greatest happiness to the greatest number of animals was secured by domestication. Benham had foretold the future when he said—"The time will come when humanity will extend its mantle over all that breathes. We have begun by attending to the condition of slaves; we shall finish by softening the condition of the animals that assist our labors or supply our wants."

**Domestic and Useful.** To keep worms out of dried fruit.—When it is stored after drying, put between every half bushel of it a large handful of bark of sassafras, and strew a liberal supply on top. I will insure that the worms will not trouble it.

**MORTUARY.**—Housekeepers should know that a small piece of paper or linen, moistened with spirits of turpentine, and put into a chest of drawers or wardrobe for a single day or three times a year, is a preservative against moths.

**OLD STOVEPIPES.**—Rusty stovepipes may be made to look nearly as good as new by simply rubbing them over with a bit of cloth moistened with sweet oil. By coating the entire pipe, joints which are unlike in appearance will be made uniform and display a nice lustre.

**MITTON OR LAMB RECHATEE.**—Cut some slices of cold underdone mutton or lamb; put into a fryingpan with enough gravy or broth to cover them. Or, if you have neither of them, make a gravy of butter, warm water and catsup. Heat to boiling, and stir in pepper and a great spoonful of currant jelly. Send to the table in a chafin dish, with the gravy poured about the meat.

**PARLOR ORNAMENTS.**—Suspend an urchin by a piece of thread tied about within half an inch of the surface of some water contained in a tumbler or vase, allowing it remain undisturbed for several weeks. It will soon burst open, and a small root seek the water, while a straight green stem with tiny leaves will shoot upwards. A little charcoal will keep it sweet.

**Africa as a Commercial Field.** Increasing attention is being given to Africa as a new commercial field. Various railroads are in process of construction in Algeria, and now a line from Algiers to the Niger at Bamba is advocated. There would be two branches—one to Timbuctoo, 80 as to take in the trade of the Upper Niger, the other would touch at Bouroum and tap the trade of the Lower Niger. Its whole length would be 2,574 kilometres; 670 kilometres would run through the oasis of Touat. The capital required for this line would be 400 million francs; but it is not very likely that it will be procured, as there are such slight difficulties in the way of such a line as scarcity of water, moving sands and hostile tribes. The traffic on which its promoters would count would be 50,000 tons of alfalfa, 15,000 of dates, 50,000 of cereals, 20,000 of cotton, indigo, skins and gums. Two French explorers, by the way, have just added a new river to our map of Africa. Its name is the Alima, and it is thought to be a confluent of the Congo. It is 150 yards wide and some sixteen feet in depth.

**Frost Patterns.** From the London Globe. The difficulties of the art of designing, in the case of "set" or geometrical patterns, have been greatly reduced by artificial contrivances. The fantastic forms created by the kaleidoscope, where the manifold reflections of a few bits of coloured glass, of half-a-dozen pins, feathers, or other common objects, cause them to assume such exquisite shapes, have been utilized by the carpet weaver and the cotton printer, by the wall-paper maker, and others, as a source whence new and striking patterns can be obtained at will. By projecting the reflection of the pattern formed in a kaleidoscope on a white sheet, after the manner of a "magic lantern" picture, the ever-changing combinations can be magnified and retained at will till a permanent copy has been taken by artists or by the aid of photography. During the winter months, many patterns, equally evanescent, and perhaps still more beautiful, are designed and traced on our windows by the hand of Jack Frost, which, if they could be perpetuated on paper, would afford pleasure to the artistic eye and be a source of profit to the manufacturer of laces, of wall papers, and of various textile and other fabrics for the adornment of which they are so wonderfully fitted. These patterns are principally to be found on the windows of bed-rooms, or other rooms in which there is a slow but regular supply of moisture—as from the chimney, flies to the window, and is there suddenly congealed on the pane, forming a gradually thickening and spreading incrustation of crystals of the most exquisite delicacy of texture and outline. The regularity of shape and design in some of these "frost patterns" is as striking as the eccentricity of others, but in all there is a certain beauty which is unrivalled in any artificial production. Even on the pavements of our streets similar patterns—of a coarser texture, of course—may be seen in the early morning after a frosty night succeeding a rainy day. Some of the slabs in the pavement form perfect set patterns; with every corresponding portion perfectly matched; others bear more fantastic and irregular marks, but all are worthy of study and even of photographic reproduction. The window patterns, however, are naturally the most delicate and beautiful, and the most easily copied.

lowed him to the lowlands in consequence of the advantages in the way of nesting which were obtained about houses. With regard to dogs, the Professor argued it was most likely that the first use to which these animals were put by man was the driving of wild cattle and other game into pits-falls, remarking that this theory would also explain the domestication of the ox, as the calf would be completely at the mercy of the hunter after the cow had fallen into the pit and would doubt