

from the Liturgy and the Lord's Prayer, intoned by the Rev. J. Coward, the collect beginning "O God, the Protector of all that trust in Thee," the ordinary prayers for the Queen and Royal family, and the general thanksgiving, in which was inserted this clause, "particularly to Albert Edward Prince of Wales, who desires now to offer up his praises and thanksgivings for Thy late mercies vouchsafed to him." A solemn and significant pause was made at these words. The special form of thanksgiving was then read as follows:—

"O Father of Mercies and God of all comfort, we thank Thee that Thou hast heard the prayers of this nation in the day of our trial: We praise and magnify Thy glorious name for that Thou hast raised Thy servant Albert Edward Prince of Wales from the bed of sickness: Thou casteth down and Thou liftest up, and health and strength are Thy gifts: We pray Thee to perfect the recovery of Thy servant, and to crown him day by day with more abundant blessings both for body and soul: through Jesus Christ our Lord. Amen."

The Archbishop of Canterbury, having ascended the pulpit at the south-east angle of the central space under the dome, at the entrance to the choir, pronounced a benediction. The anthem, composed by Mr. Goss, upon words from the 118th Psalm, was sung with fine effect. The Archbishop then delivered his sermon.

The text was from St. Paul's letter to the Romans, "Members one of another." (Romans xii. 5).

The preacher was distinctly heard by those who strove to listen as far off as the galleries at the west door. When his sermon was concluded, the Thanksgiving Hymn was sung. The verses were written by the Rev. Mr. Stone: the music is a well-known air called "Aurelia," by Dr. S. Wesley. This ended the service. The congregation was dismissed by the Archbishop, with a blessing, a few minutes before two o'clock.

The procession of Court officials was again formed, to conduct Her Majesty and their Royal Highnesses down the nave to the door by which they had entered. Having rested a few minutes in the retiring-rooms of the pavilion, they returned to their carriages, the street procession of which was similar to that for the journey to the Cathedral. Here was a guard of honour of the Scots Fusilier Guards. The guns of the Tower fired a salute, answered by those in St. James's Park. The homeward route from St. Paul's to Buckingham Palace was by the Old Bailey, over the Holborn Viaduct, along Holborn and Oxford Street, to the Marble Arch, by the east side of Hyde Park to Piccadilly, thence down Constitution Hill. The Lord Mayor, Sheriffs, and Aldermen went with the procession to the boundary of the city. The streets and house-fronts were as much crowded, along this route, as those in the Strand, Fleet Street, and Ludgate Hill: the decorations were as numerous, as tasteful, and elaborate in Holborn and Oxford Street, more especially near the Circus at the upper end of Regent Street, where a light and graceful triumphal arch was erected. The stands or galleries for spectators in the Old Bailey, on the Holborn Viaduct, and in Holborn-circus accommodated their thousands; but a greater thing of this kind was the stand put up by the Metropolitan Board of Works in Hyde Park. The Queen and the Princess and Princesses were heartily cheered, and did not seem too much fatigued. They arrived at twenty-five minutes to four o'clock. After entering Buckingham Palace, in front of which there was a great crowd, Her Majesty, with the Prince and Princess of Wales, kindly showed herself a moment on the balcony, where they graciously bowed to the people in acknowledgement of the enthusiastic greeting they had received from the Londoners that day.

The illuminations at night were the object of admiration which kept hundreds of thousands of quiet folk out in the street to a very late hour. The centres of attractions were the dome and west front of St. Paul's, the Mansion House, the triumphal arch at the crossing of Farringdon Street, between Ludgate-hill and Fleet Street, and the triumphal arch at Regent-circus, Oxford Street. The dome of St. Paul's was shown by three rings of coloured lamps, at different elevations. The shops of many of the West-End tradesmen and others were decorated with a profusion of ingenious devices. The triumphal arch at the end of Farringdon Street, above mentioned, which is the subject of one of our illustrations, was illuminated with gas jets, displaying the mottoes, "God Bless the Prince of Wales," "Thanks be to God," and "God Save the Queen and the Prince."

The Lord Mayor and Lady Mayoress entertained the Lord Mayor of Dublin and the provincial Mayors at the Mansion House on the same evening. The festival was observed in many cities and towns of the kingdom, and there were special religious services in some places.

Our illustrations, from the pencil of our London artist, represent the Civic Procession at the corner of Ludgate Hill on its way to meet the Queen, and the presentation of the City Sword to Her Majesty at Temple Bar.

THE VICTORIA CLUB SKATING TOURNAMENT.

On the evening of Saturday, the 9th inst, a grand skating tournament was held in the Victoria Rink, on Drummond St., which proved to be one of the greatest successes of the season. The programme was a long one, and the competition lists having been well filled, a large audience assembled to witness the entertainment. The races consisted of hurdle, blindfold, dash, and barrel races, with two races for boys, a girls' race, a "back-to-back," and a snow-shoe race. The blindfold and barrel races, being novelties, excited much interest and caused no little amusement. But the attraction of the evening was without doubt the Girls' Race, which brought out several rosy-cheeked little maidens, of whom it was soon perceived Miss Charlotte Fairbairn, apparently about 10 years old, was the queen, though another little lady, Miss Bethune, did exceedingly well, keeping close up to Miss Charlotte, who skated with marvellous skill for one so young. Our artist has selected this race as a subject for an illustration. At the conclusion, Mrs. Col. Bond presented the prizes:—Hurdle race, gold Maltese cross; Blindfold, a pair of skates; Boy's race, silver medal; Dash, locket; Barrel race, pin; Girls' race, 1st and 2nd, lockets; Mile race, gold circular medal; Snow-shoe race, pair of snow-shoes; Boys', silver watch chain; Barrel race, gold ring; Hurdle, purse, \$5; and Back-to-back, \$6.

VIEW ON THE MONT CENIS RAILWAY NEAR MODANE.

This illustration shows the steep grade on the Mont Cenis line between the French entrance to the tunnel, and the town of Modane. A full account of the works on the tunnel, and the new route has already been given in our last volume.

THE GREAT CHASM, B. C.

The Chasm is an immense rift—the result of a volcanic upheaval—which closes one of the great valleys in the Cascade Range, on the road to Cariboo, B. C. It lies at a distance of some twenty-five or thirty miles from the small town of Clinton, at the entrance of Green Timber forest, through which lies the route to the mining regions for nearly sixty miles. The Chasm, which abruptly breaks the evenness of the surrounding ground, forms a terrific abyss measuring from 300 to 400 feet in depth, which runs in the direction of the Cascade Range, increasing in width until it reaches the first undulation of that chain. The ruggedness of the rock, dotted with patches of grass and undergrowth, forms a vivid contrast with the greenness and beauty of the country round about, which is heavily wooded for miles around.

"IN TEARS."

The following amusing take-off on the extravagancies of reporters appears in the *Pall Mall Gazette*, in connection with the Royal Procession.

To the Editor.

Sir,—The *Daily Telegraph* of Wednesday, in its account of her Majesty's progress to St. Paul's, mentions a remarkable circumstance which occurred in Pall-mall, and I venture to trespass on your page in the hope that some person cognizant of the fact will kindly give further details respecting an incident that fully deserves to be rendered "historical." As the Royal Procession approached the War Office, the excitement, says the *Telegraph*, became almost painful: "It is scarcely a cheer here. It is a sob of delight. The eyes of many of the women, straining to see the procession from the War Office platform, are streaming with tears, and there are bearded warriors at the 'Rag' over the way, crying like children." I am not surprised, Sir, to hear that the ladies at the War Office wept—ladies at all times are apt to give way to their emotions, and the War Office, with its traditions and aspirations, is a place highly provocative of tears. But that the "bearded warriors" at the "Rag" should become hysterical is a really striking and touching incident. I was in Pall-mall myself, but unfortunately missed the display of feeling recorded by the *Telegraph*. I am ashamed to say that, although standing close to a platform erected in front of one of the clubs, I heard no sobs, but only laughter excited by the ribaldry of the mob as a corpulent gentleman, covered with lace and sitting on a military saddle far too small for him, jolted along the carriage road in evident anguish. The ignorant crowd would have it that he was a police officer, but I am inclined to think he was an Austrian general, for his bearing was that of a man accustomed to warfare, and the tone in which he told everybody jammed up against area railings to stand farther back was truly appalling. Had I been aware of the painful scene that was occurring at the "Rag," I would have immediately elbowed my way to the spot and rendered all the assistance in my power by collecting pocket-handkerchiefs and bottles of smelling-salts from the good-natured crowd and handing them up to the club windows for the use of the "bearded warriors" who were thus overcome by emotion. At the same time I confess that the sight of the "Rag" and the War Office simultaneously dissolved in tears would have almost unmanned me, although accustomed to witness distressing scenes.—I am, Sir, your obedient servant,
Feb. 20.

A COUNTRY CLERGYMAN.

SCIENCE AND ART.

Yet another art treasure trove in Belgium. An Antwerp picture dealer lately bought an old picture on wood for 5*l.* An artist examining it declared it to be a Teniers. It represents a water-course, with two small boats and a few peasants on the banks. The painting has been cleaned and restored, and is to be exhibited at the Cercle Artistique at Brussels.

Some one has been testing the accuracy of thermometers. He took one mounted on box-wood, one on metal, and one very dirty. In the shade one degree covered the range of difference between them. In the sun they differed 10 degrees. The method of mounting seems to make a variation in the effects of heat, and may account partly for the well-known fact that thermometers, as well as doctors, often disagree.

EFFECT OF PETROLEUM ON METALS.—A bronze composed of seven parts of copper, four of zinc and one of tin has been found to be so hard that it is very difficult to work, and is yet of considerable value for certain purposes when worked. So great is this value that various methods have been tried, and much ingenuity applied in efforts to devise a ready method of working the alloy. Quite recently, according to the *Journal de Fabrication de Gazette*, M. Bechstein has attained this desirable end by soaking the alloy in petroleum.

NEW MATERIAL FOR CRUCIBLES.—A new mineral has recently been discovered at Wocheln, in Krain, a province of Austria, which is reported as promising to become of much importance in the manufacture of crucibles, etc., for assayers, steel-making, etc. This mineral is called Wochelit, after the place where it is found. Its chief recommendation lies in its large percentage (50.82) of alumina. Richter has demonstrated that the resistance of crucibles to the effects of heat depends largely upon the amount of alumina contained in the fireclay. The new mineral is found to do best when mixed in about equal proportions with the best fireclay.

DEPOSIT OF MINERAL PAINT.—Our attention, says the *Ludiana Democrat*, has been called to the wonderful productions of sienna or mineral paint, found in large quantities upon the farm of John Cessna, in Banks Township, in this county. This paint comes from a bank of rocks on Straight's Run, and is deposited in large quantities in a dam. It has been pronounced by competent judges a superior article, really better than the sienna imported from France and Italy, for the reason that it is entirely without grit. According to the definitions, it is a silicate of iron, and is also called *terra sienna*. It is estimated that the deposit is inexhaustible, hundreds of thousands of tons being exposed; and this is increased every day by the quantities which flow from the rocks.

GAS POKERS.—It is only quite recently that anything has been done to obviate the trouble invariably attendant upon kindling fires. Various fire kindlers, such as cakes of rosin and sawdust, etc., have been introduced, and found very serviceable; but the latest and most original effort in this direction is a "gas poker," simply a hollow iron tube, shaped like a poker, with perforated holes in one extremity, and the other arranged with a flexible tube, of sufficient length to connect the "poker," when thrust into the stove or grate, with the nearest gas burner. This done a match will light the gas, and in a few minutes you have a fire, whether of wood or coal, without any trouble or litter. Any kind of coal but anthracite may thus be readily lighted. For city use, or wherever gas is used this is the simplest and most effective idea yet brought out.

A new metal has been discovered, consisting of an alloy, of which the composition is a secret known only to the discoverer. It carries the colour of eighteen carat gold, has the greatest ductility and malleability, and hence can be rolled and spun, or cast, to advantage. It will not corrode by water or the atmosphere, and is not influenced by the action of sea water, and thus offers advantages for roofing and sheathing for vessels, and particularly for water-pipes. Its ductility presents facilities for stamped ware, while the sharpness of the castings made from it render any finish unnecessary. Its cost is twenty-six cents per pound in ingots, as compared with the present price of copper, and will range about three cents per pound under that of ingot copper. For builders' hardware, such as knobs, escutcheons, butts, etc., the specimens shown surpass in beauty and can be offered at just half the cost of the bronzed ware of this class now on sale.—*Chicago Journal of Commerce*.

PHOTOGRAPHED NERVE SECTIONS.—Dr. Duchenne, of Boulogne, has presented to the French Academy of Medicine an album containing copies of photographs of the appearances presented by sections of the great sympathetic nerve, the spinal ganglia, the spinal cord, and the medulla oblongata greatly magnified. He fixed the photographs on stone by a process he termed photo-autography, the details of which, however, he does not communicate. It is satisfactory to find him stating that the results confirm the substantial accuracy of the beautiful drawings made by Dr. Lockhart Clarke of the central part of the nervous system, and especially upon the medulla oblongata. In his latter experiments Dr. Duchenne has adopted Dr. Clarke's method of preparation with chromic acid and carmine. He states that certain micrographic details come out with wonderful clearness in the photographs, and that by this means some important additions may be made to our knowledge. He has ascertained that in the white substance of the medulla oblongata there are nerve tubules from thirty-three ten thousandths of a millimeter to three-hundredths of a millimeter in diameter.—*Nature*.

MISCELLANEOUS.

A clam, weighing two pounds and seven ounces, was picked up on the beach at Newport the other day.

Eighty-two persons were killed and one hundred and twenty-one injured on the Erie railroad in 1871.

According to the *Illustrated London News* telegrams in connection with the Washington treaty have cost Great Britain £7,277 13*s.* 6*d.*

Here is a treasure for Bibliomaniacs. The "Constitution of the French Republic of 1794," bound in human skin, is to be sold at the *Hôtel des Ventes* in Paris, a volume said to have emanated from the famous Moulon tannery denounced to the convention by Galetti. Such binding, however, is by no means rare, as the public library of Burg St. Emands contains an octavo volume bound with the skin of an executed murderer, and a Russian poet recently presented his lady love with his works bound in the skin of his own leg, which had been amputated some months before.

A CURIOUS SPECULATION.—It seems that when the Edinburgh College Wynd was recently demolished under the powers of the City Improvement Trust, all the oak found in the houses that were pulled down was bought by one person. His object was to manufacture the wood into souvenirs of Sir Walter Scott. This, it seems, has been done, and in many of the shops in the city card trays, paper knives, and other articles have made their appearance, bearing to be made of "Wood from the Birthplace of Sir Walter Scott, College Wynd, Edinburgh." A good deal of taste appears to have been shown in their manufacture.

A new Domesday Book is promised at last. The original Domesday Book was compiled in the year 1086. It entirely omitted Northumberland and Durham, and only included parts of the neighbouring counties of Westmoreland and Cumberland, but for all the rest of the kingdom was complete. The new Domesday Book is to consist of a complete list of all persons who own land to the extent of an acre and upwards, with the amount of their holdings. The number of the smaller holders in each county will be given, but not their names. No attempt is to be made to follow the ancient example by giving the value of the land.

Prussia, it is reported, possesses a source of wealth which enables her to conduct wars without as great sacrifices as have to be borne by less favoured countries. This source of wealth consists in the possession of the means of obtaining a sufficiency of horses. In December, 1867, in the entire Kingdom of Prussia there were 2,343,817 horses, while the province of Prussia alone, constituting 18.5 per cent of the entire area and containing one-eighth of the population, had at the same time 540,721 horses. Just previous to the Franco-German war the average price paid for army horses was only \$120.

The Berlin correspondent of the *London Times* gives an interesting sketch of the continental Powers. Germany has at her immediate disposal 1,000,000 men; the French army will be raised to 600,000, and in twelve years will be doubled; Austria has more than 600,000 men immediately available; and in a few years the Russian army will number 1,600,000 men. The correspondent mentions, incidentally, that the "entire loss of Germany in the campaign has been lately ascertained as something like 180,000 men, rather more than one-half of whom are invalided."