

there to be gazed at by an admiring crowd of dirty urchins, who could not raise money enough to get inside.

It is considered very heroic when a horse has been dismembered if the picador can rally him for a ride about the arena, with his entrails protruding from the wound. This latter spectacle always excites great applause from the spectators who occupy the lower range of seats. One of the bulls, a fine orange color, from Andalusia, leaped the barrier seven times, and turned upon his pursuers with astonishing vigor. This same animal killed six horses before he fell under the sharp prick of the rapier. The last bull of the four showed no fight—he refused to attack the horses, and seemed to look imploringly around upon the people as if to say, “can it be possible that in this city of Madrid, the capital of Spain, which professes to be Christian, such awful cruelty is permitted,” but he was not to be let off; the programme called for the slaughter of four bulls, therefore he must die; and four large bloodhounds were let loose upon him, when the fight became somewhat spirited, until they had fastened their fangs into his flesh, and held him fast when the matador terminated his life with the rapier.

The performance wound up with the introduction of four young bulls let in, in succession, with balls on their horns, to be worried by the crowd. There would have been some amusement in this but for the shocking sights which had preceded it. There is nothing whatever in this spectacle that deserves to be called a fight. It is simply a cruel method of torturing to death a few bulls—and old worn-out horses.

The whole exhibition lasted two hours and a half, and seemed to afford infinite satisfaction to the crowd of natives who were present. It was bad enough, we found, to once witness such a scene, but what shall be said of the people who cherish it as the great national sport.

It is, however, no more than just to say that the higher orders of society are beginning to look with disfavor upon bull-fighting. Such brutalizing spectacles are now encouraged chiefly by the lower classes, with the few strangers who witness them from motives of pure curiosity. Having witnessed this, the chiefsport of Spain, which appears to have kept pace with the progress of the nation, we concluded to give the minor sport of cock-fighting the cold shoulder; and were glad to get out of Madrid as early as possible the next morning.

Some English writer has said that when he visited a Spanish bull fight, he felt as though the clock of time had been turned back eighteen hundred years.

OBITUARY.

Ichabod Washburn, “Deacon Washburn” as he was known, of the firm of Washburn & Moen, Worcester, Mass., died on the 30th of December last, having been identified with the manufacture of machinery in this country for nearly half a century. He was of old Puritan stock, and the writer was one of his first apprentices, when it was the style to make the youngest apprentice a member of the “master’s” family. The honesty, integrity, and business capacity of Mr. Washburn are not more vividly brought to mind than his kindness to, and carefulness of all who came under his roof or were confided to his protection.

He became first established in business as one of the firm of Washburn & Goddard, successors of Capt. John Earle in Worcester, Mass., the first builder of wool carding machinery in that State.

“Deacon” Washburn is held in remembrance by many mechanics who received their first mechanical education under him, and apart from these living monuments of his fidelity to duty and his conscientiousness as an employer and the head of a family, he will be held in grateful remembrance by those who are destined to enjoy and improve by his gift to the Worcester County Institute of Industrial Science, to which he donated a brick machine shop, completely equipped, and \$50,000 as working capital, and a fund of \$200,000, the proceeds of which are to be used for the purposes of the institution.

In all the relations of life, employer, father, husband, friend, and citizen, he was an example worthy of imitation. His loss will be felt far beyond the limits of the city he honored by his generosity.

The Deepest Coalpit in England.

A correspondent of the London Telegraph has been down the great coalpit at Wigan, and writes a long account of what he saw and heard, from which we extract the following interesting details: “It is very difficult to realize the enormous value of Wigan underground. Looking at the plans of the mines which we mean to inspect to-day, we see that between the surface and the deepest point to which the sinkers have reached, there have been no fewer than twelve workable seams of coal. These include the great seam of cannel. The seams are classed in five different series. First there is the Ince series, consisting of four seams—the ‘yard’ seam, at a depth of eighty-four yards; the ‘four feet’ seam, one hundred and thirty-four yards below the surface; the ‘seven-feet’ seam, twenty-six yards lower; and the ‘furnace’ seam, at a distance of one hundred and eighty-six yards from the surface. With the exception of that which was named last, all these seams are exhausted. Below them come the Pemberton series, with a five-feet seam, at a depth of two hundred and seventy yards, and a four feet seam twenty-five yards beneath. Then there is the Wigan series, with its five feet, four feet, and nine feet seams; the first of which is four hundred and forty-five, the second four hundred and sixty-six, and the third four hundred and ninety-five yards below the surface. Lower still, at a depth of six hundred yards, is the famous cannel seam, and now the men are going even below that; they have indeed sunk the shaft to the yard seam of the Orrell series, which is six hundred and seventy-three yards below the surface; and are now, night after night, pushing their way to the

fiery and dangerous Arley seam, which is here more than eight hundred yards below ground, although at Hindley they have reached the same coal at a depth of three hundred and twenty yards. There are about six hundred and fifty men employed at these mines—the Rosebridge Collieries. Just now the times are rather bad for colliers. They have not been known to be worse at any time during the last thirty years.

“After chatting awhile with the manager and his son, we made ready for a descent. We do this by doffing the clothing we ordinarily wear, and donning in its stead a very rough miner’s dress. Then we (the manager’s son and the writer) walk out, and, calling at the lamp room, provide ourselves with lamps, which are somewhat better than the ordinary ‘Davy.’

“It is necessary to prepare the nerves for a shock. We are going down to the Cannel Mine, a depth of six hundred yards, and the big engine will throw us that distance in less than a minute. At a signal there is, as it were, a sudden withdrawal of the bottom of the cage beneath our feet, and a rapid falling through dark space; then there is a sudden check, and we feel, not only as if we had regained our footing, but as if we were being thrust back again as rapidly as we had been before falling. Before time is allowed to analyse the sensations we have experienced, the cage touches the bottom, and we stumble out half dizzy into the eye of the pit.

“Before we leave the pit eye we have our lamps lit, and then turn to take a stroll into the workings. We are not long in reaching a little cabin, into which we step, and while sitting there we are told some particulars respecting life in the pit. When the men come to work they obtain their lamps, already lit, but unlocked, at the pit bank. Then they descend, and at the pit eye the lamps are examined and locked. They are again examined as the men enter the particular district of the mine in which they may be employed. Every day the fireman examines the clothes of each miner, to prevent the introduction of pipes and matches. The law is observed very strictly. If a man is found to have the means of striking a light he is sent before a magistrate, and either fined or imprisoned. But such a discovery is rarely made at Rosebridge. The authority of the manager is regarded, and he himself is personally respected by the men; and throughout a large colliery district these mines are noted for the admirable system of working adopted, and for the skill and wisdom engaged in their management.

“From talk about matters in general, we still sitting in this cabin, six hundred yards below the surface of the earth, turn to what is more personal, and I learn that my guide has had his dangers and his narrow escapes, as all men must have who have to do with the getting of coal. Once he was in at an explosion, and of course ran for his life. The subtle choke damp, that palpable white mist, was swifter than himself, and floating all about him, so numbed his senses that he sat down, and felt as if lulled to a gentle, delicious sleep. Consciousness was fast passing from him, when his brother, stronger than himself, dragged him rapidly to the pit eye, and saved his life. My friend thinks that choke-damp is the easiest and nicest possible way of dying. There is no pain—there is simply a going to sleep, which you have neither the wish nor the power to prevent.”

Exchange of Skill for Labor—China and the United States.

The Shanghai News-Letter suggests the outline of a plan by which China and America may enter upon a system of exchanges on a grand scale for their common benefit. The outline is given by a respected missionary in the north of China, where there is a plethora of labor and a dearth of skill; and where experience has convinced him that an exchange would be advantageous for both countries. America needs labor; China needs skill. China can furnish the first; America the second; and both would be benefited by the furnishing. He would pour into each of the Western and Southern States a million of laborers, men who by virtue of patient, industrious, and imitative habits are prepared to obey, to follow, and to execute; and would accept in return the larger brain, superior education, and stronger will which qualify Americans to originate, plan, and command. “Let them come to China,” he says, “and fill the land with railroads, steamboats, and telegraphs. Let them develop her vast mines of coal, iron, gold, silver, copper, and lead. Let them light her cities with gas and supply them with water. Let them become physicians, teachers, and preachers. Let them create for her an army and navy, and command them for the good of the Chinese nation,” etc., etc. By a proper distribution of brain and muscle, and a good understanding, the missionary anticipates the time when the empire and the republic will hold the destinies of the world.

Editorial Summary.

THE SOUTH AFRICAN GOLD FIELDS.—The Philadelphia Ledger says, the South African gold fields are to be visited by an exploring party, composed of certain well known travelers in Africa, and of assistants skilled in mining gold in California. A photographer will be attached to the party. The expedition will be absent for over a year, and will visit regions where no travelers have as yet been. Mr. Baines, one of the company, has already visited the Transvaal region, and describes the operations of the native goldsmiths as follows: They use, he says, a broken earthen pot for a furnace, and a small goat skin for bellows. The crucibles are made from the nests of the mason wasps, and the metal is cast into ingots five or six inches long by half an inch square. The ingots are made into bars by the use of a hammer on a small anvil, weighing three or four pounds. The natives use blowpipes made out of the section of a gun barrel.

THE NEW STATE DAM AT COHOES.—This work is rapidly progressing. It is to be fifteen feet higher than the old structure, and stands twelve feet further down the river. It is supposed the increased height will prevent the hitherto frequent drifting over and wreck of boats during the freshets to which the Mohawk is liable. Four hundred feet of the dam are already completed and on pier. The total length will be sixteen hundred and forty feet. Its width at the bottom is eighteen feet, and at the top ten feet. Its height varies from fourteen to twenty feet. The whole structure is of granite.

AN adaptation of the semaphore signal post to street traffic is now the subject of experiment in London, the object being to assist the police of that city in preventing the concentration of vehicles at crossings when stoppages occur. The use of the signal is to warn approaching vehicles against coming too near, and thus enabling the officers to make a diffused or general stoppage some distance from the crossing rather than the usual jam and confusion now common in such cases. Something of the kind is also greatly needed in New York.

THE European Mail says the little Prince Theodore has got out of the channel of gossip, and few know where he is and how he is being brought up. The young Abyssinian is at school at Bonchurch, in the Isle of Wight, and turns out with the boys—a very dark speck on their line of white faces. The expression of the lad’s face is good, and his eyes are such as might serve for a chapter on “dark orbs” for anyone in writing a novel. He is under the charge of Captain Speedy, who is bringing him up kindly and carefully.

THE largest kitchen in the world is that of Liebig’s Extract of Meat Company’s establishment at Fray Bentos, on the river Uruguay, South America. The building covers an area of 20,000 square feet. In one hall there are four meat cutters, which can dispose of 200 bullocks each per hour. There are 12 digesters in which the meat is boiled by steam. They can hold altogether 144,000 pounds of beef. About 80 oxen per hour are actually slaughtered for this immense establishment.

PARADE OF THE NEW YORK LETTER CARRIERS.—On the morning of the 30th December, the letter carriers of New York city, arrayed in the new uniform of the department, paraded through the streets to the number of about two hundred. Our rural friends may form some idea of the extent of the postoffice business here when it is known that it takes the entire time of over two hundred men to deliver the mails, exclusive of the large amount of matter taken from the boxes.

DISASTROUS FIRE IN LYNN.—The thriving and busy city of Lynn, Mass., has received a severe blow in the disastrous fire on Christmas night. It was the most serious conflagration ever experienced by that town, and although it will not seriously affect its chief industry, the manufacture of boots and shoes, it throws 600 hands out of employment in the dead of winter, and inflicts severe loss upon many prominent business men.

THE steam roller for leveling and smoothing newly made or recently repaired roads just introduced in Liverpool, seemed at first to be a great success. It seems, however, that its use has resulted in serious injury to the network of gas and water pipes underlying the streets, and its weight will have to be reduced or its use discontinued.

A GERMAN savant has put forth a singular and novel theory to account for the decay of the trees in the gardens and promenades of Berlin as well as in other large European cities. He attributes this decay to the tremulous motion of the ground, which prevents the perfect adherence of the soil to the roots necessary to the absorption of nourishing juices.

THE whole of the capital required for the laying of the new French Atlantic cable has been subscribed and the first instalments paid in. Four hundred and sixty miles of cable are completed and the work is progressing rapidly. The Great Eastern is fitted out and was to commence receiving the cable in the earlier part of January.

PROF. MARSH, of Yale College, is said to have discovered in the tertiary deposits of Nebraska the minutest fossil horse yet obtained. It is only two two feet high, although full grown, as the character of the bones fully indicates. This makes the seventeenth species of fossil horse discovered on this continent.

THE improvement made in the art of watchmaking, and the present approach to perfection are shown by the fact that in 1862 the average deviation of the Neufchatel chronometer was 1.61 seconds per day; but one was recently finished and tested which gave only .164 of a second variation in twenty-four hours.

THE longest artillery range on record, namely, 10,300 yards, was lately attained at Shoeburyness by Mr. Whitworth’s 9-inch muzzle loader gun of 14 tons firing a shot of 250 lbs. with a charge of 50 lbs. This range is 225 yards over that of the 7-inch Lynall Thomas gun, which in 1861 ranged 10,075 yards.

The American sewing machine has crossed the Alps, and has made its appearance in the chief cities of Italy. It is reported that there is a lively competition going on among the dealers in Florence. No other people in Europe more need the introduction of labor-saving machinery than the Italians.

IT is stated that the Mont Cenis Tunnel lacks but little more than two miles of completion.