ther they found the coal around the furnace was in a complete state of ignition. The coal and woodwork in the upcast shaft had taken fire, and the flames were raging furiously. He could compare it to nothing but a river of molten lead being poured down the shaft. They proceeded 200 or 250 yards along the south level, and found the whole of the furnace down, and the coal on fire. They proceeded up the levels and boardgates as far as they dared to venture, until they came in contact with the inflammable gas, and were obliged to retreat.—They returned to the shaft, and then made an examination of the north levels, along which they proceeded for a distance of 400 yards, up to the fourth boardgate. During the investigation they found many dead bodies, and the men who accompanied them brought the remains to the shaft. One man was found close to the bottom of the shaft.; further on they found ten bodies in a mass. Not far from the furnace it was supposed that a large number of bodies were lying, as the men generally congregated near the fire at dinner time. The furnace was blown down, and the stables (containing six horses) were on fire. When they got near the upcast shaft they saw immense masses of coal and rock falling down. The shaft was like a furnace. They were in the pit above two hours. The stoppages and brattices between the two shafts were completely blown away, and therefore, except in the level, the pit was dead, i e, full of bad air. They would have succeeded in putting up stoppages, but the fire increased to such an extent that they were obliged to retreat.—They were so placed that if they had not retreated they would have been excluded from the air and suffocated, because the air was 'backing' direct from one shaft to the other. Himself, Mr. Coe, and Mr. Maddison ascended the shaft and held a consultation, but their companions ascended in haste, saying that it was impossible for any one to remain down any longer. Of course they then considered it their duty to acquaint the owners with the condition of the mine, and to state that it was imperative to close the shafts, as there was no probability of saving and more lives; and that it was the only chance to render the pit in a condition fit for working it again. Mr. Webster added—My companions and myself, feeling the awful responsibility which rested upon our heads, thought it was only prudent to consult with the men who had gone down with us. They were called in separately, and asked if they were of opinion that it was impossible to get any more bodies out of the mine. They concurred in the opinion that it was impossible, and we acted upon their resolution and our own by covering over the tops of the pits. In a few minutes after we came out of the mine, the cupola shaft was filled with fire, which reached 50 yards above the summit, and the sparks from that body of flame ascended 100 yards higher.

THE CORONER'S INQUEST.

On Monday, the jury, to inquire into the deaths of the 170 persons killed by this explosion, was empanelled by the Coroner, Mr. Thomas Badger. The poor fellow into whose death the jury first sat to inquire, was Abraham Turner, about 20 years of age, who lived with his widowed mother near the old factory, at Wath. Abraham was single, and was the chief support of his mother. The other son, named Stephen, was married and lived at Hemingfield.—This son is now among the dead in the pit, and has left, beside his mother, a wife and two children to mourn his loss, and it is expected that she will be confined again shortly. William Coldbridge of Lund Hill, one of the firemen at the colliery, described the manner in which he had got the deceased out of the pit. He then said that on the morning of the accident he found all the places he visited in good working order.—He could not form any opinion as to what was the cause of the fearful explosion. It is supposed that there are now over 160 persons in the pit. The pit was worked with naked candles in some parts, and Davy lamps were necessary; generally candles were used. He and all the other men thought it quite safe to use them. He ordered Davy lamps to be used where he thought them necessary. John Warhurst, fireman, said: I was at home when the explosion occurred. I went there immediately afterwards. I found the chair for the stoves was blown up into the headgear.—Power was applied to remove it, but without success, and the rope was cut as quickly as possible. We got into the pit as soon as we could; it was about half-past four o'clock. I, Joseph Coe, and William Beevers, were the first to descend. We heard men at the bottom screaming for assistance. We found a number of men congregated at the bottom and sent them out as soon as possible. I left a man named Hammerton, assisting to get the men out, and proceeded to look round. On reaching the cupola (up-cast shaft,) I found that it was on fire about the furnace. I found a man lying on a heap of burning coals and took him off. I could only get a few yards further up the boardgate for the fire-damp which fired in my lamp. I returned into the level, and there met with another dead body. I did not recognize either of them. Further on in the south level I found a third and fourth body; after which I returned to the shaft, thinking it was not prudent to go further by myself. I had gone 70 or 80 yards. I went to the cupola and found the fire burning about 25 yards each way, and on seeing it, I went and told the other persons the furnace would fall in; indeed, I saw the arches of the furnace, and some masses of burning coal, fall down the side of the drift leading to the furnace. I expected that if we remained we should all be killed, and the other men were of the same opinion. I saw the stables on fire. We could not get to both the ends of the stables, for the gas fired in the lamps about 20 yards up the northboard. We went up every board, both north and south, as far as we could get. We found inflammable gas up every board.

The Coroner—Can you form any opinion as to the cause of the accident?

I cannot form any, unless it be that some trapper had left a door open in one of the boards. This is a mere supposition, I cannot indicate any particular direction where I suppose a door was left open.

RIFLE AND ARTILLERY IMPROVEMENTS IN INDIA.

BY AN OFFICER OF THE ROYAL ARTILLERY.

The officers of the Indian army, equal as they most undoubtedly are to any others in the world in practical experience, have not made themselves so generally conspicuous in Europe as might on the first view of the case appear reasonable to expect, in any scientific alterations or improvements in professional subjects. Whether it is that India or the Company do not afford the facilities more or less required by genius for the development of its conceptions, or whether it is that men employed, as they have been, more actively than most others in the practical duties of their profession have no time to give to alterations which their position does not render very urgent, most certain it is that improvements more frequently go from the west to the east, than in an opposite direction. Nor is there anything disparaging, as may at first appear, to the Indian army in this being the case. Second to none as it is in its performances in the field against the enemy, and in the brilliancy of the services it has rendered to the country, it is more than probable that circumstances do not give it that fair field which might be wished from the eminence of some of its members, for advancing ideas on subjects of military improvement. The great distance from home at which it is situated, and the inferiority (perhaps not always so great as is imagined) in the armies usually opposed to it, may have some influence; or it may be, and this most likely is the real obstacle, that the East India Company have no interest in innovations, however advantageous they may appear to be, especially if they create expense, which it is the nature of every important change more or less to do. They may, not unreasonably, consider that if they march along with, without going or attempting to go ahead of what is considered to suffice for the wants of European warfare, such a position is as much as they need care to maintain. Individual enterprise and genius will occasionally, however, break through barriers like these, and, whether with or without encouragement, will strive to bring forward and work out new ideas.

These remarks are induced by the recent receipt from India of accounts of a new rifled gun and rifle musket, the inventions of Lieutenant-Colonel Jacob of the Bombay Artillery. Some of the performances of the latter (the former would as yet appear to be in embryo), though likely to excite less astonishment than they would have done a few years ago, are still sufficiently remarkable, if truly stated, as they appear to be, to be brought under notice. The rifle is described as "single-barrelled, 30 inches long, 24 inches gauge, four-grooved, grooves to take one complete turn in 36 inches of length; good lock, mainspring connected with tumbler by link; half-cock a little above nipple, trap in butt; full stocked barrel attached to stock by bands; steel ramrod with hollow head exactly fitting the small end of the ball; sword bayonet 24 inches (of peculiar form, not easy to describe in words) of the best cast steel; case-hardened iron mountings, and no brass or bright metal of any kind about the piece; long folding sight with slide, both the sight itself and the slide to be made with springs to prevent their working loose. Weight of the whole, sword included, 9¾ lbs."

It will be seen that there is nothing in all this very strikingly different from many rifles which have been already manufactured. The great merit of Colonel Jacob's invention would appear to apply to the projectile he makes use of, the effects of which, in an Indian paper noticing the subject, are described as something marvellous. The rifle, like the French field artillery gun of the Emperor Louis Napoleon, discharges either a solid bullet or a shell. Both are constructed of a peculiar form best adapted for flight through the air, and so scientifically has this form been attained, that the bullet or shell can be driven to the same distance with one half as much powder as can be arrived at with any of the bullets of the different shapes now in use. The head of the projectile is formed of zinc or iron for the protection of its figure, and presents in