MACHINE FOR MAKING HORSESHOES .- An ingenious machine for this purpose has been erected at Chillington Ironworks, in this town, by the inventor and proprietor. Mr. Henry Burden, of Troy, in the State of New York, and the proprietor of an ironworks in that town. Mr. Burton is a native of Dumblane, in Scotland, and from his early vouth showed considerable at titude for mechanical pursuits. From an account published of his cateer in the New American Cyclopædia, it appears that he is the author of numerous valuable inventions, including a machine for making the doubleheaded spike, used exter sively on the American railways; and a self-acting machine for reducing puddlers' halls into blooms, which is being largely used in that country .-As early as 1835 he took out a patent for a machine for making horseshoes, which he improved upon in 1843, and this was turned to practical account by the production of The present machine, however, which was a considerable number of horseshoes. patented in 1857, is entirely different from the former ones, and is a very remarkable piece of mechanism. In the previous machines the piece of iron bar of which the shoe was to be made was rolled into shape before being bent, and the pressure of the rollers being in the direction of its length, the bar, when it was pressed, was naturally rather extended in length than width, and the widening which is required at the crown of the shoe was not properly effected. By the present plan the bar, after being heated, enters the machine by a feeding apparatus, a piece of the required length is cut off, and, by a stroke from a piece of steel, shaped like the inside of a horseshoe, is bent, and falls upon a die on a wheel beneath, corresponding to one on a cylinder above, and thus acquires by pressure the desired shape, two lateral strikers at the same moment hitting the extremities, or heels, of the shoe, and driving them inwards into the required shape. Thence it passes between another pair of dies, where it is stamped, and by an ingenious arrangement is flattened from the curled shape which the wheel gives it as it falls at the mouth of the machine. The shoes thus made are remarkable for their exactness in shape and in the position of the holes, a most important point with regard to the safety of horses' feet; and they can be produced, when the machine is in proper order, at the rate of 60 per minute, which is more than two men can forge in a day, and the superiority over shoes forged by hand is very striking. As the bar is bent before being pressed in the die, the pressure at the crown is in the direction of the width, and hence the widening is readily affected. The machine is secured by patent in this and in most of the countries of Europe. It has been crected at Wolverhampton as a central and suitable place of inspection both for this country and for any persons on the continent who may desire to purchase it, the inventor desiring to sell his patent rights in Europe. The United States Government purchase the shoes thus made, for the supply of the cavalry of the States .- Wolverhampton Chronicle.

COAL IN THE UNITED STATES .--- An edition of Professor Henry D. Rogers's "Geology of Pennsylvania has been issued in London, and has excited much comment in the English journals. The statements of Professor Rogers in regard to the enormous coal fields of the United States excite much surprise, and lead to many speculations concerning their possible development. The coal districts of Great Britain appear as mere specks when compared with those of America. The coal fields of Great Britain, in figures, amount to 5400 square miles; those of Europe are only 8964 square miles; while those of the United States, in the aggregate, comprise no less than 196,850 square miles; added to which the British Provinces of North America contain 7530 square One of the English papers says :--- "When we reflect upon what has been miles. achieved by the produce of the coal fields of Britain, and then endeavor to anticipate the mining of the vast fields of the United States upon an extensive scale, we are led to forecast a future of almost boundless enterprise for that wonderful country." The following illustrations will convey some idea to the reader of the amount of coal there exists in Europe and America. We need not fear any scarcity for thousands of years. Averaging the total thickness of the workable coal in Great Britain at thirty-five feet. we have a total of workable coal equal to 190,000,000,000 tons. In the same way, estimating the total area of the productive coal fields of North America as 200,000 square miles (that is inclusive of the British Provinces), and averaging the thickness of good workable coal at 20 feet, we gain a result of 4,000,000,000,000. Or, to make these results the more appreciable : if we take the amount of workable coal in Belgium as 1, then that in the British Islands is rather more than 5, that in all Europe 8 3-4, and that in all the coal fields of North America is 111. This method of ratio is more intelligible than that of relative superficial magnitudes, -- and we at once perceive that the United States possesses more than twenty-two times the amount of coal in the mines of Great Britain!