THE SCIENTIFIC AMERICAN.

BURIAL OF THE DEAD-MUMMIES-GLASS COFFINS.

Two or three years ago a gentleman of this city was so anxious about the proper disposition of his body, after he should leave it, that he had procured a coffin to be accurately made to order, and kept it in his house always ready for its final use. But this foresight of dissolution proved the very means of hastening that sad event; for one day, reaching for something placed on top of the coffin, which stood on end like a cupboard, it fell forward, crushing him to the floor and killing him instantly. This unfortunate man no doubt was a connoisseur in coffins, and had made a deep study of the art of burial. He had been on Potters' Field and knew the fate of poor folk, or had seen the removal of graves about the old Brick Church. And perhaps he had gone but a little way beyond the speculations of almost any one of us; for who does not sometimes think of what shall become of his mortal coil? Certainly all men have a choice in the matter, and many express it. We go to view the ground where we shall shortly lie, we plant the eyprus over the final home, we hew tombs from the We hold as the greatest crime, the desecration of rock. the grave, and we think with shuddering of the feast of worms; and no man envies the fate of poor Yorick, or is pleased with imagining the sight of his own skull on a phrenologist's sbelf. Mankind have always had such notions, and the resources of science and skill have always been in request for the perpetual security of what of us is mortal. The decent disposal of the dead is ever looked upon as a sacred duty of the living, and is everywhere surrounded with the solemnities of religion. The denial of burial rites is the last and greatest punishment of criminals. It is only among savages or through the exigencies of war or commerce, that the bodies of men are left unprotected on the earth or cast into the sca.

So it is not at all strange that coffins were used at a very early day, and the first allusion to a coffin in history associates with it the art of embalming. In the book of Genesis we are told that the body of Joseph was embalmed and placed in a coffin in Egypt. The first material for coffins was probably wood, but as soon as the art of working in stone and clay was learned, coffins of the most durable character were made; indeed coffins are among the most interesting rolics extant of the remotest antiquity. Layard found plenty of coffins of stone, clay, and even glazed earthenware, about Mesopotamia and in Egypt and Palestine sarcophagi and tombs are the objects of prime interest to travelers. The Egyptians of all people showed the greatest care in preserving their dead. They removed the most perishable organs of the body and by the use of spices and balsams, the flesh was rendered imputrescible; the body was then closely wrapped up in linen cloth. The coffin into which the body was now laid, was of pasteboard or a kind of papier machè, shaped much like the body, profusely ornamented by moldings, colors and gold. This paper coffin was laid in another of the same material, and this in another and another, still all of paper, and at last the body in its series of four proper coffins was enclosed in one of wood. thus preparing it for its final receptacle of stone, which for kings was a pyramid. In Egypt there are now so many mummies packed closely together, that they speak of mummy by the square league. In some countries (especially Spanish) the coffin is used only like our hearse, as a receptacle of transport to the tomb, in which the body is laid, and closed np by masonry. It is to such a tomb that Shakespere represents that Juliet was carried.

There is quite another method of disposing of the dead which was in vogue in ancient times, particularly among the Greeks, namely, burning or incineration. The body was placed upon a funeral pyre of wood, and the firo was kindled by the nearest of kin or the dearest friend. When all was burned the ashes were carefully collected, placed in an urn and finally enclosed in the tomb. This practice, originating in pagan superstition, disappeared with the rising of Christianity. In modern times a few poets like Shelley, or mistaken sanitary philosophers, have tried to revive the practice without success

In our day we have at command all the materials which are most fit for the manufacture of coffins, and some which our forefathers knew nothing about. Wood has always been the only resource of the poor, but those who can afford it, and are most anxious that the bodies of

their friends shall be undisturbed for centuries, will have coffins of lead, stone, pottery, cast iron, &c. The making of coffins (as appears from the fact that every person must have one) is a very important branch of industry and a productive field for the able inveutor.

The above thoughts and recollections have been sugested by an examination of a coffin made entirely of clear white glass by Mr. John R. Cannon, of New Albany, Ind. There is no substance so durable as glass, nothing which will so securely keep whatever is inclosed in it, and it is probably only for the reason of difficulties of construction that glass coffins have not been sooner made. The qualities and advantages of glass for the purpose are easily apprehended and need no elucidation from us. The coffin exhibited to us is composed of two parts, each molded by pressure ; the joint is made true by grinding, and secured by cement so as to hermetically seal the cavity. For still further security Mr. Cannon binds on the cover by passing around the whole two or more metallic straps, to which are attached ornamented handles. When desired, also, the interior air may be removed by an exhaust pump, or displaced by carbonic acid.

A coffin thus made constitutes a tomb of itself, at at once simple and convenient; and by the simple appliances which Mr. Cannon has invented, it can be made very cheaply, at the same time being susceptible of a great variety of ornamentation, it may be made as expensive as the most costly coffins now used. The application of glass to this purpose is novel, and seems likely not only to open up a new and important industry, but to work important changes in the mode of preserving the mortal remains of humanity.

A NEW FIRE-EXTINGUISHER.

Many of our readers will recollect that, some years ago, Phillip's Fire Annihilator was flamingly presented to the public under the auspices of P. T. Barnum, the Napoleon of popular cntertainments. It made considerable noise for a while, and finally disappeared from public view till within a few months past, when we noticed the fact that one of them cxploded and actually set a building on fire where it was placed as guard against such a contingency ! It needs no argument to demonstrate that to extinguish a fire by the use of gas in the open air is an absurdity, but that combustion can be suppressed in apartments from which external air is more or less excluded is no visionary scheme. A patent for a chemical compound that will accomplish this object was issued to Chas. G. Mueller on the 6th of March last; and we were present at a recent trial in Hoboken, which, although conducted on a comparatively small scale, proved the efficacy of the invention under the conditions mentioned. An apartment measuring 20 cubic feet, provided with 10 holes of 2 of an inch in diameter each, and which communicated with the external air, was used for the purpose. Well-dried pine wood, splints and shavings were introduced into this apartment, and when fairly ignited, a small quantityan ounce or two-of the compound was thrown in and the door closed. At the expiration of two minutes the door was opened, and all combustion found extinct. Subsequently, two trials were made with alcohol, mixed with powdered resin and with spirits of ether. These highly inflammable fluids were similarly extinguished in the space, respectively, of 25 and 15 seconds. The united areas of the 10 holes was much greater in proportion to the volume of the apartment referred to than the united areas of the crevices to warerooms, holds of vessels, &c. is proportioned to their volume. The compound is put up in a compact, portable form, is easily managed by any person, and can be used at a moment's warning. It is manufactured and sold by Mueller and Carmand, No. 594 Broadway, this city.

TRADE STRIKES.—At a meeting of the Civil and Mechanical Engineers' Society, held in London as reported in the Engineer, a paper was read by Mr. A. F. Yarrow, on "Strikes," in which some very original and sound in the views are enunciated. He showed that the capitalist and mechanic are the same in relation to one another as the buyer and seller of commodities, and inferred that as the value of commodities is fixed by supply and demand, wages must therefore fluctuate under the same law. In order to raise wages, machinery, warehouses, railroads, &c., must be increased. Strikes are nearly always unsnecessful, and are injurious to all parties. There have day.

been very few successful strikes-so called by the operatives gaining their point—but were ultimately injurious. Many strikes had taken place on the introduction of machinery, but it was a great mistake to suppose that improvements tended to lower wages. If this were the case, then the highest wages would be paid in those countries where inventions were unknown and where the people were neither thoughtful nor inventive. As machinery increases our productive powers, it has also a tendency to raise wages, because it tends to increase the stock of capital. The sum of the lecture was:-1. That wages can only be raised by increasing industry, sobriety, honesty, &c., in order to augment the stock of capital. 2. Strikes are in all cases attended with injurious effects, largely compared with the advantages, even when they are successful.

INDUSTRY-MANUFACTURES-COMMERCE.

A company, called the "Grant White-lead and Oilworks," has been incorporated at Memphis, Tenn. It has a chartered capital of \$250,000; the principal business is to be the manufacture of cotton-seed oil.

The fourth annual fair of the State Agricultural Society of Mississippi will be held at the city of Holly Springs during four days in next Fall—from Oct. 16th to 20th.

Coal oil is employed on the western division of the Sunbury and Erie Railroad as a lubricator. For heavy bearings it is used pure; for light journals it is mixed with lard oil in the proportions of four of coal to six of the lard. No less than 109,000 gallons of it have been already used on this railroad.

The canal boat, F. K. Jones, from Oswego, N. Y., recently brought a load of 6,370 bushels of wheat through the Erie canal. This is the largest load ever brought by one boat. Its length is $76\frac{1}{7}$ feet; breadth, $17\frac{1}{7}$ feet.

The New York Central Railroad Company have placed 12 new cars on their track for the summer travel, each of which is furnished with arrangements to exclude all the dust.

The Hamilton (C. W.) City Council have contracted for the erection of a Crystal Palace for the exhibition of the Provincial Agricultural Association during the next Fall.

Messrs. Hazlett & Hobbs, of Pittsburgh, Pa., inform us that they are obtaining 16 barrels of oil per day from a well in Richie county, Va., and they are about sinking a number of others in the same oily locality.

New York is a great unfinished city. It is rapidly extending northward at an unprecedented rate. "Broadway," at the present time, is a remarkable scene of demolition and re-construction. The new buildings which are replacing the old ones are of imposing architecture, and it is estimated that, in this single street, the erection of the new edifices will cost about \$6,000,000.

A bill has passed the House of Representatives, smending the steamboat law. It brings ferry-boats under the provisions of the Act of 1852; and a system of lights is prescribed for steamers and sailing vessels.

The California papers state that considerable quantities of rape-seed oil have been introduced into San Francisco from Japan, and several of them ask: "Cannot this oil be manufactured at home?" It can, and is a very excellent oil for burning in what are called the "French mechanical lamps."

The Boston Commercial Bulletin states that a New Bedford (Mass.) flour mill has just obtained two very large main belts for its use; they are each 140 feet long, 22 inches wide, double, and very heavy, requiring about 100 whole hides to make them, and cost nearly \$1,100.

The gentleman is still alive (in his 92d year) who, in June, 1790, cut the first tree ever cut on the town plot of Gallipolis, Ohio. At that time there was a small settlement at Marietta and another at Cincinnati; the balance of Ohio was a wilderness; there were not, then, probably 1,000 white people in it altogether; now it contains near 2,500,000 inhabitants, and has been changed from a wilderness to one of the best agricultural States in the Union. Who ever before, in a single life, witnessed such a change?

In the village of Saxton's River, ∇t ., a large boot and shoe factory is now being completed. The work for all parts of the shoes is to be made in the factory, and principally by machinery of the best description and latest improvements, among which are to be two pegging machines, each capable of pegging 500 pairs of shoes per