pollen of the rag weed, in some persons will produce the same effect; also the flowering of roses, and the inhalation of dust, exhaled from the foliage of growing plants and trees. Hooping cough is no doubt a certain form of bronchitis, induced by a specific morbid poison directly on the bronchial mucous membrane.

A very severe form of bronchitis often accompanies some of the eruptive fevers, measles, scarlatina, and small-pox, constituting a most dangerous and sometimes fatal complication. In measles, the recession of eruption is frequently followed by a great increase in the bronchial disorder, which is announced by the great increase of cough, and sudden oppressive dyspnœa. From the suddenness of the production and disappearance of the latter symptoms, which is occasionally observed in the cases, it has been suggested, that it is possible they may be rather congestive, than inflammatory, although if the congestion continue, bronchitis is the final result.

There are also many chronic diseases which may be said to favor the developement of acute bronchitis, these are Bright's disease of the kidneys, and diseases of the heart and lungs. It often occurs during the progress of pulmonary tuberculosis, and sometimes proves very fatal to the patient.—*Med. & Surg. Rep.*

First Discovery of the use of Coal.

The Belgians claim to have been the first to discover the use of coal, and this discovery, they say, was made by one Hullos, a blacksmith, of the village of Pienevaux, near Liege, in the year 1049, from whose name they derive the word "houille." Coal was first used as fuel in London in the latter part of the thirteenth century; but the smoke was considered so injurious to the public health that Parliament petitioned King Edward I. to prohibit its burning as an intolerable nuisance. He complied, and issued his proclamation against it. The most severe measures were then employed to abolish its use—fines, imprisonment, and the destruction of furnaces and workshops where it was used.

Animal Grafts.

Plastic surgery recognizes life in a part and grafts one part of the body on another, or replaces a portion of a nose or a finger when lopped off, and witnesses its continued growth. In lower animals this principle is more astonishingly developed. Cut a polyp into a dozen pieces and each fragment will develope itself into an independent and perfect type of the species. A French naturalist, M. Vulpain, cut off the tails of tadpoles, and saw them not only live but grow for ten days, indifferent to all theories of nervous centers, digestive apparatus, or circulatory systems. But the member that seems to have the strongest dose of the "vital principle," is the tail of a rat. This is the very ideal of life, and here, if anywhere, we ought to locate the seat of vitality. The following experiment was made by Mr. Bert. He dried a rat's tail under the bell of an air pump, and in immediate proximity to concentrated sulphuric acid, so as gradually to deprive it of all moisture. Then he placed it in a hermetically sealed glass tube for five days. At the end of this time he subjected it for a number of hours to a temperature of 98° Cent. in a stove, and subsequently sealed it a second time in his tube. Four days more having elapsed, he united this tail by its cut extremity, to the freshly cut stump of a living healthy rat, and quietly awaited the result. His success was as complete as it was marvellous. It commenced to expand and perform the natural duties of a tail, and three months afterward he demonstrated by a second amputation, and a careful injection, that it was furnished with proper vessels and was a living part of the second rat!

What rich lessons practical surgery may learn from such experiments, can be imagined. A careful anatomist has transplanted a fragment of bone from the skull of one rabbit to the skull of another, and found it form adhesions and replace the lost portion perfectly. A piece of periosteum taken from a rabbit twenty-four hours after death, grew and produced bone when grafted neatly on a living animal of the same species. Nerves also have been removed from one body to another with success, and some very singular results noticed where a portion of a motor was excised and supplied by a fragment of a sensory filament. The diseases to which grafted members are subject, after they have been exposed to certain re-agents, are also full of hints for the pathologist and the physician. —*Medical and Surgical Reporter.*

Artificial Digestion.

A London physician, Dr. Marcet, has announced a process by which natural digestion is simulated by artificial means, and solid food may thereby be prepared for invalids. Dr. Marcet takes fifty-eight grains of muriatic acid having a specific gravity of 1·1496; fifteen grains of pepsine—the organic principle procured from the stomach of a pig or other animal. Diluted in a pint of water and added to a pound of raw meat, the whole is allowed to simmer over a water bath, at about the temperature of the body, 98° F. When the meat is by this means sufficiently broken up, it is strained and the acid neutralized by eighty-one grains of bicarbonate of soda. The product is of a most agreeable character, easily digested and vastly more nutritious than beef ea. Where pepsine cannot be obtained, the doctor has found strips of calves' stomachs answer very well.

Time required for seeing the Exposition.

To view the Paris Exhibition (according to an English writer's calculation), it is necessary to devote on an average five minutes to the glass case of each exhibitor. These number, it is stated, 45-000; it would, therefore, take 225,000 minutes, making 3,750 hours, or 156 days 6 hours; that is, 5 months, 6 days and 6 hours, reckoning 24 hours for each day. But as the interior of the place can only be visited from 10 o'clock in the morning till 6 in the evening, there at only 8 hours at the visitor's disposal instead of 24. One would therefore be occupied in the inspection 15 months, 18 days, 18 hours, supposing that he entered the building every day at 10 o'clock and did not leave it until 6. From this calculation it will be obvious that it is by no means possible to examine the whole of the exhibition during the period of its duration.