Scientific Museum.

Mortality of Cities.

Although there is stated to be an immense amount of pauperism in London, and consequently much suffering, it is a positive fact that the number of deaths in it annually is less in proportion to its inhabitants than that of the larger cities in our country. The following table is a list of the population, and mortality of London and four American cities for one quarter:—

MORTALITY OF JULY, AUGUST, AND SEPTEMBER.

Philadelphia	2,955	400,000	1 to 135½
New York,	7,529	550,000	1 to 73
Baltimore	1,610	180,000	1 to 112
Boston,	1,391	150,000	1 to 108
London,	12,918	2,200,000	1 to 169

The mortality in New York is truly frightful for the above three months, but then they are the most sickly months in the whole year.—And beside this, there are other causes which contribute to this great excess of mortality over other cities. This is the port where the great mass of emigrants from all parts of the world land. Thousands of these poor people are weak and emaciated when they come here and arriving in a different climate from that of their native countries, they are liable to be stricken down suddenly by exposure to the sun, and are more subject to the attacks of prevailing diseases than the natives of this city. When so many were sun struck in this city last summer, very few Americans lost their lives—not one in fifty we believe—while no less than seven-tenths of the number were natives of Ireland. In proportion to the number of native and foreign inhabitants of New York, we are confident that there are ten deaths among the latter to one of the former. There is no city on our continent more healthy as it respects climate and local diseases. It might, however, be rendered much healthier by the better enforcement of one single sanitory measure, namely, keeping the streets clean and free from mud and dust.

Irrigation by Artesian Wells.

Between the rivers Neuces and Rio Grande, in Texas, there is a large extent of country, than which there is no finer grazing lands in the world, excepting at times when severe drouths visit it. During such periods—and they are frequent—the graziers have to drive their flocks to great distances, in search of water. In that quarter also, the cultivation of the soil cannot be accomplished, owing to such drouths. It is proposed to water some of these plains by artesian wells, one of which it is stated will be sufficient to supply 500 acres with a sufficiency of pure water for any number of animals, on that extent of land. We have seen it stated in some of our southern cotemporary journals, that a wealthy planter from San Antonia is now in Alabama securing implements and workmen for the purpose of sinking such wells in that part of the country of Texas which we have named; we hope the project will be eminently successful.

A New Piano.

It is well known that Liszt, considered by many the greatest pianist in the world, has withdrawn himself from public life for a year or two past. "Spiridion," the entertaining Paris correspondent of the "Boston Atlas," says his retirement was caused by dissatisfaction with the piano, it would no longer accomplish his desires. He has accordingly devoted all his energies to the production of a new instrument, and the best piano makers of Germany and Russia were employed in the task. The work is said to be accomplished, and "Spiridion" writes:—

"M. Alexandre wrote to him recently, informing him that he had succeeded in making the desired instrument. M. Listz flew hither. M. Alexandre's invention is not merely a piano, there are three finger boards susperposed one on the other, and which give to the player power of combining all the effects of a full orchestra; two of the finger boards are pianos, the other calls into existence flutes, clarionets, hautboys, violins, violincellos, human voices—everything, an organ, wind instruments, cord instruments. The piano may now join the stage coach, the signal telegraph, and the other discarded wonders of our ancestors. Its day is ending."

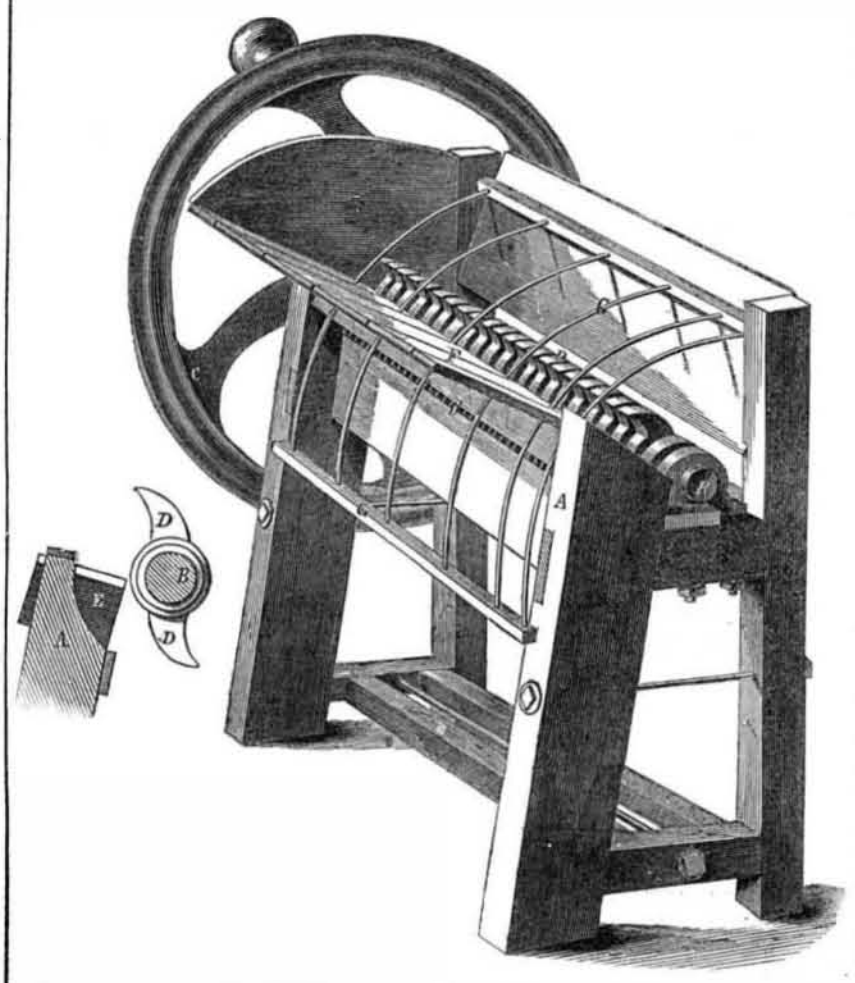
[The above has been extensively copied, but it is a piece of nonsense from beginning to end. Pianos were built twenty years ago combining the flute, clarionet, and some other instruments, but such a combined instrument is not a piano any more than a banjo is a violin. The piano as it is will never go the way of the signal telegraph any more than the violin. Such a hotch potch of an instrument may do very well to astonish the gawkies.

Guano.

The British Government has received official despatches from the Admiral commanding in the Pacific relative to the quantity of guano remaining upon the Chincha Islands. It is estimated that the available supply amounts to eight million six hundred thousand tons; but the Admiral imagines that the islands will be exhausted of saleable guano worth freighting to England in eight or nine years.

This is very significant information, it should incite our farmers to look for new fertilizers at home.

STRAW AND VEGETABLE CUTTER.



The engraving herewith presented is a perspective view of a Straw and Vegetable Cutter, patented Dec. 21st, 1852, by W. Gale, of Louisville, Ky., now residing in Troy, N. Y. The machine is of a novel construction and its operation is efficient.

A is the frame of the machine; B is the feeding shaft, turned by the balance crank, C, having upon it the spurs, D, which grasp the straw or vegetables, and press it against the stationary knives, E (see the small cut at the left). F is the feeding table, upon which the straw is thrown, the grate-fall, G, being elevated until the straw is thrown in, when it compresses it and carries it downward to the feeding hooks.

The knives are so constructed that when broken, the ends may be readily changed or new ones put in, in their stead, and they may also be ground with facility. We have witnessed the operation of this machine and think favorably of it. In simplicity of construction, and that great desideratum of agricultural implements, easiness of repair, we know of none superior. Any further information can be obtained by addressing the inventor as above.

Great Discovery—A Universal Telegraph.

The "Mining Journal" minutely describes the marvellous improvements effected by Mr. Wilkins in the electric telegraph, by which the system bids fair to be thoroughly revolutionized. Mr. Wilkins is a telegraph engineer of Hempstead, and has secured a patent for his extraordinary invention, which will be made available to the public by the Universal Electric Telegraph Company. The improvements for which Mr. Wilkins's electric telegraph will be distinguished are intended to meet all existing defects. It will form one of its very peculiar and striking characteristics, that instead of the message being, as at present, expounded often by guess, liable to be misunderstood or mistaken from variations of the index, or from many other causes, the message will be written by the telegraph instrument itself. By means of his singularly ingenious apparatus, the message leaves the telegraph written on paper by the instrument in clear and distinct characters, delivered in a continuous line and unvarying position. It is not even dependent, as was forly proposed, on the chemical action of the electric fluid on certain sensitive colors, but the machine will enable parties to perpetuate an accurate record of the message, the value of which, in all intercourse, as well in affairs of state as in all legal, monetary, and commercial transactions, is almost incalculable. The ingenuity is perfectly marvellous, which arranges the telegraphic apparatus to be worked by the electric current, so as to give motion to a marker, or tracer, and thereby impress, mark, or otherwise render visible, in a continuous line on paper, characters representing letters, words, and figures on the recording surface, which is kept constantly moving by means of clockwork, or other suitable machinery, while the characters are marked, or otherwise produced by the electric current, in a fixed manner, capable of being read upon it. By a contrivance of surpassing ingenuity the transmission of the message will be simultaneous to any number of radiating stations without the aid of intermediate operators, only one operator being required at each telegraph. This branch of improvement is effected by a delicate piece of machinery, the "Automaton Repeater," by means of which any number of towns, or places within the circle of construction, may be communicated with at the same moment by one and the same electric touch." Mr. Wilkins's plan is also remarkable for the extreme simplicity of the telegraph, for one wire will be sufficient, and in order to prevent the uncertainties which have impeded the development of the telegraphic system, he has devised a superior plan of insulators. It is calculated to insure the most perfect and unerring accuracy by the total absence of quivering points and needles, and by abstaining from the use of chemical preparations, always liable to mislead and very often to fail.—[New York Tribune.

We copy the above from the "Tribune," but we have seen the same article in a number of our daily papers. This surprises us not a little, as those papers have been in the habit for years past of receiving messages every day from all parts of our country, by just such a telegraph as that described above. It is nothing more nor less than the Morse Telegraph *as it is*, and of which there are 27,000 miles of wires erected in the United States. It is indeed a strange thing to us that the "London Mining Journal," which is partly devoted to the propagation of new discoveries, should be so ignorant of this American invention, but at the same time we must say that it appears more than strange to us, that such ignorance should be displayed in any paper in our country—it betrays great stupidity. It affords our people some evidence, however, of the length of time required, and the long round-about distance (from Washington to London and back again) which truth and scientific knowledge have to travel before it can enter the eyes or the ears of men devoted merely to light literature and politics—they cannot be trusted, in giving opinions about new claimed inventions.

Who the Mr. Wilkins mentioned above is, as having made the great discovery, we do not know, but we can tell him that if he reads Prof. Morse's re-issued patent, he will find he has been anticipated long ago, and that he is sailing under the false colors of being the inventor of that which belongs to an American.

Hints to Stock Raisers.

Mix occasionally one part of salt with four or five of wood ashes, and give it to your stock of all kinds during summer and winter. Green and fermentable food produces flatulency, and this mixture affords a remedy. It is said that if horses are liberally supplied with salt and clean wood ashes, they will neither be troubled with botts nor cholic.—[Connecticut Valley Farmer

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