great number of watches are imported entire. We are informed, upon reliable authority, that five times more watches are sold annually in North America, than in any other portion of the globe containing the same number of inhabitants. We ought therefore to be a punctual people, since we are so careful in our observations of "fleeting time." In 1857—before the "panic"—we imported watches and their works to the value of $3,281,000; in 1858, the importation was valued a $2,207,000, but since that period this business has been very dull.

A very useful little book on this subject has lately been produced by H. F. Piaget, of this city, a practical watch maker of 40 years' experience. He commenced his efforts at fabricating watchwork in Switzerland, when he was only seven years old; he also made watches in London for several years and has followed the same craft for a considerable time in America, so that he can speak authoritatively on the subject. The whole operations of a watch are dependent upon the retractile elastic force of a coiled steel spring—that is its moving power. The operation of moving the hands on the dial regularly, to measure time are due to devices which control the coiled spring so as to permit it to "run down," with regularity. A train of small wheels, gearing into one another, receives motion from one wheel on the spindle of the main spring; and this gives the requisite number of revolutions to the time hands on the dial. A watch is a very simple machine, so far as it relates to the *principles* of its operation; but the construction of its parts and their arrangement call forth the highest exercise of mechanical skill.

The above-named author says that the English were really the first successful manufacturers of watches, and that "all the escapements applied to good ones, whether at home or abroad, were invented by them." The best of these are jeweled with rubies, the art of boring which (for pivot holes) was discovered by M. Fazio, of Geneva, in 1790. He could not get his invention adopted in Paris, however; so he then went to London where he was well received. Rubies are the hardest stones which can be drilled, and are therefore the best for pivots; but garnets and various other crystals are used for the more common sort of watches; the English and American ones have generally a diamond jewel set over the upper part of the balance.

The Swiss are the largest manufacturers of watches in the world, and all the cheap showy varieties which are seen in jewelers' windows are principally of their manufacture. From recent statistics which we have examined, the making of watches gives employment to 36,000 workmen in the Alpine Republic. England and Switzerland are the only countries which export their time-keepers to any great extent; those which come from the former are the most accurate in their movements; those from the latter are the neatest and cheapest, yet some of the Swiss watches have also a very high reputation as being accurate time-keepers. One of the very best and finely finished that ever M. Piaget saw had been made at Geneva, and was sent to California. The plates and bars for the wheels were of nickel, the wheels were of gold, it had a compensation ballance, an isochronal hair spring, and anchor escapement.

The opinion of an experienced and skilled artisan, as to the character of our American-made watches, is of great value. We are told by M. Piaget that "the American watch recommends itself for simplicity of construction, and it will be continually *improving* if the manufacture remains in the hands of persons who will make it of good quality without regard to the price." This is timely and appropriate advice: it is an injunction to strive for excellence rather than cheapness in such articles. The advice is particularly good, at this time, because very great efforts have of late years been made to produce cheap rather than good watches. When we consider that this country affords such an extensive market for foreign watches, it certainly opens a large field for those of domestic manufacture if they can be produced of equal quality at the same prices. This is a question for our people to solve. They have the natural mechanical genius to invent, and with patience and application they will finally succeed in this and in many other important branches of manufacture.—*Scientific American.*

Correspondence.

Pleuro-Pneumonia.

EDITOR AGRICULTURIST,—The earnest and unremitting efforts which you are putting forth to inform your readers on this subject are extremely praiseworthy. To prevent, suppress, or counteract a disease which has made such fearful ravages in our herds wherever it has made its appearance, is an end much to be desired, and the individual, who by his undivided energies accomplishes that end, is as great a "benefactor to his country as if he had caused two blades of grass to grow where only one had grown before."

I can scarcely imagine what kind of an idea those people can have of diseases that are "catching," as they term them. I suppose there is some peculiar kind of *mythologica*l animals which take their position in some portion of the animal organism and there continue to feast until a new object presents itself, or the life of the animal which they have attacked is extinct. After giving the matter a pretty thorough investigation, I am inclined to arrive at a similar conclusion to the boy who was asked "what the earth's axis?" to which he replied, "I guess an imaginary line running through the head of old philosophers;" and possibly imaginary animals are running through the heads of those who entertain such vague notions.