number of fibre-yielding plants, inquiries why their produce is not utilized, is told that was pioneered in the great obstacle of making a rapid fortune from that source, goes back to the United States, has machinery invented, runs on the subject only, becomes enthusiastic about it, and now gives the sum total of his studies and inquiries.

A lifelong great enter for fibres, and a great many new seeds are brought into the market; but brokers tell us that they have the greatest difficulty in inducing the landowners to give the seeds. They are not brought into the market, and many have been left to rot in the warehouses, or have been sold at ruinous prices to the man who sent them, because there was actually no market for them. Indeed, it has become an axiom, that the introduction of this article shares the fate usual for all inventions and discoveries—of not deriving any substantial profit from the benefit conferred upon the public. In spite, however, of the pig-headedness of manufacturers, several fibres substances have worked their way into the mills by their superior excellence. As a material of paper, the Esparto (Lygeum Spartium) has carried off the prize. Nearly every bundle of hay that weighs more than 100 tons has to be flaked into 10 tons of straw, and the straw is soon ready to be ground up. The common way of flaking hay is to chap it with a long bladed scythe, and then to cut it up with a knife. The Esparto hay is much more convenient than the common way of flaking it, and is much cheaper. It is now in use by many of the large manufacturers, and is now printed entirely on material obtained from the Esparto; and we know that a firm is now established in several manufactories in the Mediterranean for the purpose of sending the "pulp" home, and thus save the high freights charged by the fishemn on the Jute fibre. The Esparto, a long, tough, and fibrous plant, has been introduced into the market by the manufacturers, and is illustrated by an excellent example. A few years ago, the Esparto works in the United States, valued at $100,000 dollars, were imported into the United States, valued at $100,000 dollars. Attempts have been made to cultivate this plant in Florida, and Congress was persuaded to grant considerable tracts of land to a company formed for that purpose; but the savage nature of the Indians led to the destruction of the experimenters. We doubt, even if such an undertaking had been attempted, whether it would ever pay to cultivate it. The Esparto is a native of Florida, and the climate and soil of the United States are not favorable for its growth. The Esparto is a native of Florida, and the climate and soil of the United States are not favorable for its growth. However, the Esparto is a native of Florida, and the climate and soil of the United States are not favorable for its growth. Therefore, the Esparto is a native of Florida, and the climate and soil of the United States are not favorable for its growth.

Apostole M. Aristote.


This accomplished Orientalist, M. Barthélémy St.-Hilaire, is widely known as an elegant translator of numerous portions of Aristote's works. He has now issued a serviceable translation of a neglected but curious treatise on Meteorology, which we are sure will prove acceptable to many modern students. Aristote's "Meteorology" represents the highest form of physical science as it existed more than 2000 years ago, and continued to be its only text-book until the dawn of the modern era. As a translation, M. St.-Hilaire's work is all we could desire, for the text is rendered in fluent French, without a trace of jargon, and is illustrated by useful notes, without a particle of pedantry. A precise and lengthy work forth with greater success than the claims of Aristote to consideration among meteorologists, and includes a masterly sketch of the modern state of meteorology, drawn with sharper outlines and fewer strokes than we recollect to have met with in any similar attempt. M. St.-Hilaire claims more than the reputation of a theorist for his favourite author; and considers that in none of his works more manifestly than in his "Meteorology," Aristote has shown himself an inquirer after the facts of nature and a true experimenter. He is no less remarkable for his judicious selection from particular to general instances, M. St.-Hilaire contrasts the subtle and metaphysical character of his mind, which has never succeeded in elaborating any scientific work, with the copious writings left us by the Greeks.

Aristotle's "Meteorology" is so neglected by scholars, who find its topics little suited to their taste, and so unknown to men of science who, as a rule, cannot read Greek with fluency, that the contents of the present volume are likely to cause surprise. Meteorologists little suspect that a consideration of the ground-plan of their science was written in a comprehen- sive philosopher three and a half centuries before the Christian era. Where they may have expected to find sun's rays, or wind's influence on the climate, they will find a treatise that discusses evaporation and condensation of water, the formation of clouds, rain, hail, dew, and dry-frost; the distribution of water from the sea to the land and back to the ocean; and, at least, dry exhalations, their effect on the climate, and the influence of winds. They will find discussions on rainy, hall, and dry-frost, and may also follow the author through the various fields of the natural sciences, and into the domains of modern meteorology, and lead to theories on comets and the Milky Way. It is the extent of this work, more than the success with which it attacks his problems, that astonishes us. The headings that would be impossible to translate in this modern work would go far to supply those of a modern text-book. It makes one indignant at the unfitness of the mind of the men of the middle ages, who rested content with bold outlines like these, and never took the trouble to note the closeness with which his conclusions run parallel to the truth.

This, then, is the spirit of the modern meteorologist, accustomed to the increased sagacity of his own time, and to the increased knowledge of the various sciences by which his own investigations are aided. It makes one indignant at the unfitness of the mind of the men of the middle ages, who rested content with bold outlines like these, and never took the trouble to note the closeness with which his conclusions run parallel to the truth.

The fourteenth chapter contains a remarkable and characteristic argument of the peculiar changes of the earth's surface from land to sea. It begins, as usual, with a wrong theory, and works round to an almost just conclusion. He says that the extinction of moisture in any part of the earth varies from epoch to epoch. That as animals flourish and decay, so the earth varies. Various regions of vigor, which affect it partially, sometimes in one part and sometimes in another, and in various epochs affecting the regions, are sometimes dry and others are covered with water. The establishment of dry land, where the sea had stood, is only at certain times, and the sea's movements of time, compared to the term of our existence. Nebulae perish too rapidly to retain the collection of these epochs.

He utters the memorable saying that the earth is entirely made by the Nile; and proves the assertion by an erroneous fact, for his argu- ment. He concludes, "It is clear, since the earth never changes, and the universe is eternal, that the waters of the Nile and the Nile have always flowed, and that the place where the waters run at this moment has at one time been a dry land, and the sea by which it is inhabited, and returns to others, it is evident that the same districts are not always seas or continents, but that everything changes in the character of age. Nothing can be more clearly expressed than this; and we should not accept Aristotle's idea of the advanced with those of our own schools of even a few years back, were we not that Aristotle's ideas are certainly no distinction of the sea maintaining an uniform level. We rather think the leading idea in his mind was that the sea was a mirror of the world, and that all things, excepted at the mouths of rivers, until the water above them became so shallow as to permit the ship to float, would go far to supply those of a modern work.
The Reader

21 March, 1868.

Aristotle's mind was penetrated with the Kosmos--all connected with the
insignificance of the earth compared with the
universe. The handiwork and justness with
the analogy of the Southern and unknown hemisphere from
the Northern, seems to one of us of
littleness of the earth that he supposes the equatorial
portion of Africa to be as uninhabitable from his
ego to the extreme of the earth was supposed to be unendurable from
cold. The breadth of his habitable world is bounded to
the east, and the north, of the unknown
ocean at the Straits of Gibraltar, while the
same ocean washes the shores of some Indian
islands. He boldly speculates on the condition of the unknown
remains. He shows that the Southern
hemisphere must contain a habitable zone, and
that the equatorial heat urges currents of wind
towards the pole in our Northern
desert; the same extreme heat must have
a similar action in the South.

In short, Aristotle's "Meteorology" is a very
remarkable piece of creative work, and being
rendered into a readable shape by its
French dress, and by the aid of the
excellent and inexhaustible labours of
himself and his followers, we are
pleased cordially to recommend it to all
who interest themselves in the progress of
meteorological science.

F. O.

The Transportation of Criminals: Being a Report of a Discussion at a Special Meeting of the National Association for the Promotion of the Social and Religious Progress of the Lower Classes, at the Prince of Wales' Hotel, Regent Street, on the 17th February, 1863. Edited by J. R. Pott, F. M., and Rideout, F. W. Riddell, F. A. Lodge, Hon. Secretaries to the Third Department. (Printed by Universal Typographical Union.) London: Easy to
Use.


The transportation question stands at present in this condition. Western Australia desires to have convicts sent here, as other colonies in a similar stage of advancement have so desired before. A time may come, as it has already come to every other colony to which convicts have been sent, when Western Australia also will feel herself able to walk alone, and, failing to derive from the presence of convicts any material advantage sufficient to compensate for the moral disadvantage, will warn us, in language not to be slighted, that she will go on her own way, and has already done so. Shall we avail ourselves of Western Australia as a penal colony during the interval? Shall we create new, and ever new, set
dements, with all the evils and scandals which go with them, from
time to time in the similar relation in which Western
Australia now stands during the solution of these questions. The speeches of Lord Alfred Church and Major Sandford, in the discussion held by the Royal United Service Institution, on the service of letting us know distinctly what it is that Western Australia wants, and what alone she will take from us.

"What," said Lord Alfred Churchill, "do we find in Western Australia? The chief of a few men, soon to be
have put a certain amount of time in forced labour, and
then, when they are not more marketable than they were
then, into the market again, and the market
feels the same. The same, in all its
justification, which there formerly
more, more, more, is to be treated in every respect, so far as the
value of his industry is concerned.

What the Western Australians require in, that a certain
amount of time in forced labour, and the
market feels the same. The same, in all its
justification, which there formerly
and the like. That is the work of convict labour. When
the convict is to be treated in every respect, so far as the
value of his industry is concerned.

"Where did you find it?" asked Sir William Deveron of Howitt. "In Australia. You found it a good place
town, well supplied with goods, and all the
like. That is the work of convict labour. When
the convict is to be treated in every respect, so far as the
value of his industry is concerned.

The execution of these works for the public, we
admit, was, or might have been, a sufficiently
flourishing industry. The industry of the
people of Australia, where the increase of population is
within a few thousands of 4,000,000; a
multitude of what is called "wheat states" of the
fourth-rate European states; but when last taken in
1865, emigration had done its work. The
military of the time, all the people of the peace, call themselves on to increase and multiply;
and those who found how unattended they were in
room, have, as it were, been the more to impose
with 200,000, 250,000, 300,000, 350,000, and above all, the
prices of the whole of the products of the earth: and hence, with scope for the activity of all human energies, wealth sprang into existence as if by magic, which, if only the women from all countries in Europe who poured

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