

she, with the sun, her ruler and guide, and all her companions in the mighty system, sweep away into space, as if reaching after and seeking for the unattainable.

The stars above us are suns shining by their own light. Our sun is but a star, and by no means one of the largest in the vast celestial host. There is a brotherhood among the shining number, and it would seem as if by some mysterious agency and appointment a relation existed among them, known by the term *primus inter pares*, or a chieftainship among equals.

All the denizens of the azure vault circle around one of their number, and in this mystic, marvelous movement our sun with his attendants finds place, dashing along at the rate of four hundred and eighty-seven thousand miles in the twenty-four hours—over twenty thousand miles an hour, and three hundred and thirty-three a minute. The direction of the sun at the present time is toward the constellation Hercules. The brilliant star Aleyone, the largest in the exquisite group of the Pleiades, is thought to be the master star to which all other stars are subject, and around which they are all revolving; but so vast and mighty is that orbit of which Aleyone is the center, that for the last hundred years the curve of our sun's path around it has been so inconsiderable as to permit astronomers to say it has moved only in a direct, unbending line.

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The Ammonite.

BY MARY ST. MAUR.

THE graceful Nautilus floats upon the wave unconscious that it forms a most important clue to one mystery of the past. It was an early inhabitant of the primitive ocean, yet it has survived whole ocean families that flourished for immense ages and afterward disappeared.

"Thou didst laugh at sun and breeze
In the new created seas;
Thou wast with the reptile broods
In the old sea solitudes,
Sailing in the new-made light
With the curled-up Ammonite;
Thou surviv'dst the awful shock
Which turned the ocean bed to rock,
And changed its myriad living swarms
To the marble's veined forms."

The points of resemblance are so strongly marked between it and the extinct Ammonite that the form and mechanism of the latter are easily explained.

This interesting fossil received its name from the coiled horn of the statue of Jupiter Ammon, a heathen divinity that had a human body with a ram's head.

In countries where they are found in great abundance the ignorant designate them as "snake-stones," for they imagine they were formerly snakes, petrified by the prayers of some patron saint.

They are classed with the family of Cephalopods, so called from two Greek words signifying head and foot.

These mollusks were generally attached to houses shaped outwardly much like the shell of a snail.

The body consisted of a bag, containing stomach, heart, and other organs. The large eyes protruded from a head, surrounded with tentacula

or feet; these each had a double row of suckers the entire length, which firmly held their prey after having seized upon it.

The mouth was furnished with a pair of nippers not unlike a hawk's beak, the whole forming a most destructive contrivance.

The abode of this creature was made of carbonate of lime, shaped into a hollow, flat, coiled tube, divided and strengthened by arched partitions into air-chambers, which gave it great lightness.

Through these passed a cord called a siphuncle, or little siphon, which was connected with the heart, being filled with air and a fluid, the former of which could be expanded or contracted at pleasure.

It was this hydraulic contrivance that enabled it to sink to great depths in pursuing its prey; few could escape its deadly attacks. Indeed, it seemed created to destroy the superabundance of life with which the ancient seas teemed.

Another terrible monster of the deep belonging to the same great family of Cephalopods was known as the Orthoceros, whose chambered dwellings differed from the Ammonite in being perfectly straight. They were often twelve or fifteen feet in length, and as large in circumference as a flour barrel.

These formidable denizens of the ocean ceased to exist before the earth was a suitable dwelling for man, and their remains are found in rocks that were once at the bottom of the sea.

Perhaps a sudden change of temperature ended their existence, and they sank beneath the waves. By some convulsion of nature these rocks have been thrown to the surface; here among other fossils lie the Ammonites in countless numbers, completely turned to stone. They are of all sizes, from less than half an inch to four feet in diameter.

The marl or clay which surrounds them is easily removed, and their coiled and fluted forms are disclosed as perfect as life.

Sometimes a piece of rock not more than seven inches by fifteen contains fifty small specimens. In most cases their dwelling, which was much thinner than that of the ordinary Nautilus, had entirely disappeared, leaving a perfect cast, while in others the slightest remnant of it can be seen, often showing that pearly iridescence which appears on the inner surface of many shells.

Lying at the bottom of the sea they were gradually filled with the most abundant mineral substance the water contained, generally it was lime, which took the various tints of buff, gray, or brown—each partition of the shell making a division in the filling, which evidently was very slow, as it took place through the siphuncle. This lay on the interior and outer edge of the coil, and the slender tube is often seen completely turned to stone—fossilized.

The rough exterior of the Ammonite gives no idea of the beauties developed by dividing it vertically and polishing; then we see those delicate markings which are a marvel to behold.

If the waters have contained iron pyrites in solution, each septa will be seen traced with a shining line.

Several hundred different varieties have been described, the largest and most perfect being found in the South of England.

When we remember that the Ammonite is only one of the species that inhabited the great deep, and there are besides thousands of fossil remains equally interesting, we are filled with awe.

Our minds cannot at once grasp all these wonders, only by patience and trust in His infinite wisdom can we come to a faint understanding that will help us to remember, "That the works of the Lord are great, sought out of all them that take pleasure therein."

What Women are Doing.

"Godwyn's Ordeal" is the title of a new novel by Mrs. J. K. Spender.

Mrs. Burnett's new story will be of American life, and will be called "Louisiana."

George Eliot's "Theophrastus Such" has reached its fourth edition.

"Pets and Playmates" is a new juvenile, by Miss Laura Edmonds, daughter of the late Judge Edmonds.

Of forthcoming volumes of poetry, one is "Her Lover's Friend," by Nora Perry; the other "Dramatic Persons and Moods," by Mrs. Piatt.

The "The Barn Beautiful" is a new play by Mrs. Florence I. Duncan, which deals with the modern decorative art mania.

The "Value of Life" by a woman, is in reply to a book by a man, "Is Life worth Living?"

"Women at Work" is a new publication edited and published by Mrs. E. T. Housh.

A new Illustrated journal has made its appearance in Paris, of which Mme. Olympe Audanard is one of the directors.

A Committee of Ladies in Paris have brought out "La Femme," but the articles are in bad taste, and show a lack of judgment; it does not promise success.

Rosa Bonheur dresses in semi-masculine costume in her studio, but Mlle. Bernhardt, who never does things by halves, "sculps" in actual trousers.

The Lebanon Society of Shakers has a member, Dolly Saxton, who has completed her 104th year, and is described as "happy and as lively as a cricket."

The "Worker" is a new co-operative paper, whose publisher is Mrs. Elizabeth Thompson, the philanthropist.

"French and Belgians" is a clever, sensible useful little volume, by Phœbe Earle Gibbons.

A "Woman of Mind" is a capital English novel by Mrs. Adolphe Smith.

In two Volumes devoted to the life and works of Henry Merritt, who married Miss Anna Lea, artist of Philadelphia, his widow gives a long and loving memoir of her husband, which reads more like a romance than reality. C. Kegan Paul of London is the publisher.

"Dorothea Alice Shepherd" the author of "How Two Girls Tried Farming," is Ella Farman, the editor of *Wide Awake*, and not a farmer at all.

Miss Stanton, a daughter of Elizabeth Cady Stanton, is to be one of the lecturers next winter. Miss Stanton has had five years' training at Vassar College and two at the Boston School of Oratory.

Mrs. Morehouse, of Liverpool, N. Y., has bestowed \$30,000 upon Syracuse University.

Mrs. Lydia Maria Child, the authoress and anti-slavery agitator, is now seventy-seven years old, and lives at her old home in Wayland, Mass.

Mrs. Jean Davenport Lander is said to be an excellent woman of business. She has three pretty cottages with lawns terraced to the shore near Lynn—very valuable property.

Mrs. Augusta Webster, author of "Portraits," and several other well-known volumes of poetry, is a candidate for the Chelsea and Kensington Division of the London School Board at the forthcoming election.

According to the *Bakinskiju Izvjestiju*, a Russian journal, a charming young French lady, Mlle. Laligont, is accompanying the corps of General Lazareff against the Turcomans in the capacity of a war correspondent.

Mrs. Frances Hodgson Burnett's first novel, "That Lass o' Lowrie's," was such an extraordinary success that people said it could not be re-