

the builder. Her next, and most important work, was to build cells in the interior, in which to deposit a few eggs, so, in time, to have assistance in her work. These cells, although the same in form as those of the honey bee, are made of paper, (the wasps not secreting wax.) Her method of building these, although difficult to observe, seemed to be by making her body the standard of measurement, working at the foundations in a horizontal position, and frequently applying her abdomen to the base of the cells, and as the work proceeded, frequently backing into the cells, as though trying their capacity by her body. Three cells thus built, the only ones I had an opportunity of observing, as the other stories of the house cut off the light from the interior so much, as to obscure the methods of work. The next step in house keeping was to deposit an egg in each shell. This cell building occupied one day. As the ambition of a mother wasp is to have a large family, she next commenced a second story to her house, by commencing at the base of the first story, near the wood, and after four days labor, formed another story of paper, enveloping the first story, at a distance of about three-sixteenths of an inch from it. Her next work was to cut away the paper of the first story, parallel with the top of the first tier of cells, leaving narrow connections of the paper walls, to hold the first story together. A second tier of cells was then built, fastened to the outer edges of the first tier for support. This second tier of cells was five in number, a small space being left between the first and second tiers of cells, for circulation of air, evidently. After this, the work of building a third story in the same manner as the others, was commenced, but proceeded slowly, as the eggs were by this time hatched into white footless grubs, whose appetites kept the mother a portion of her time foraging for honey and pollen, and the juice of ripe fruits, the food alike of adult and baby paper wasps. In about a month from the commencement of the house the three first laid eggs had passed through all the stages of egg, larva and pupa, and emerged full fledged worker wasps, smaller than their mother, and who at once proceeded to assist in the house-building, which by this time had advanced to the fourth story, each story with its tier of cells and different stages of egg, larva and pupa. At the present time the house has a diameter of about three inches, and as the tenants are always at home evenings, I jarred the house one evening, and counted twenty-three wasps, who sallied out to

fight the disturber of their peace; and it was comical to see their efforts to reach me through the glass panels, behind which I have taken so much pleasure in observing the skill and intelligence of these little paper makers. And by the way some of your readers may not be aware that (like many other useful ideas man has copied from nature,) the art of paper making owes its origin to the observation of the methods of the paper wasp in obtaining his material, and the first paper was made by the same observer, by scraping old wood fibre, (in imitation of the wasps) and moistening it with water, afterwards smoothing and drying it. And at the present time, after many substances have been successfully experimented with in the manufacture of paper, yet, a large amount of the paper used for ordinary purposes is manufactured from wood. To all readers I would say, cultivate your habits of observation of natural objects. Aside from the pleasure it will confer, it may be the means of giving you some valuable hints that may produce practical results in the economy of the world, as several of man's most successful mechanical constructions have been applied principles copied from nature.

FOR THE GAZETTE.

1688—ALEXANDER POPE --1744.

BY A. ST. GEORGE RICHARDSON.

With regard to the question whether Pope was a poet or not, Dr. Johnson in his "Lives of the Poets," has firmly established the fact that Pope was a poet; and we ourselves can plainly see that a man, who wrote so much and so variously as he, and whose works are now read by everyone, must surely have possessed the qualities of a poet.

As such he came into popularity while quite young and I may say a mere boy, for he wrote his famous ode on Solitude while only twelve years of age; and when sixteen he wrote his Pastorals, which by their simplicity, softness, and smoothness of verse, gained for him considerable praise and fame. Though Pope received no College training, nor entered any University, yet still the knowledge, which he acquired and possessed by his careful study of books, histories and reading, fully enabled him to perform the duties of a Poet. He undertook the stupendous task of translating Homer's Iliad, by no means an easy one for any other than a poet. In the comparison between Pope and Dryden, we find that the latter wrote for the most part through necessity, whereas Pope