"FAGGING," OR "SLAVERY," AMONG THE ANTS.

there is some reason to believe a kind of slavery is not unknown amongst insects.

There is a description of ant that lives quite like an independent gentleman, and has just as little idea of helping himself. All his work must be done for him; and for this purpose he keeps a large establishment of slaves. The gentleman and lady ants, if they have attained to the dignity of married* people, do no work at all; but the old maid+ ants do as much as this-they pay a tax for their single-blessedness by being expected "to engage all the servants;" that is, to capture the slaves, and so keep up the proper complement in the household staff. With this exception, we say, they do no work at all; they do not even make their own nests, or feed themselves, or attend to their own young.

Sometimes these dignified people want a change of quarters. This is very bad news for the slaves; for the said slaves have to act as quarter-masters, to explore the whereabouts, to make all the arrangements for the move, and actually carry their masters and mistresses in their mouths.

Huber thought he would try what the lazy creatures could do when obliged; so he went to a party of them, turned off their servants, and shut up about thirty without any one to wait upon them, but with plenty of food, and their families about them as an extra inducement to exert themselves; but no single thing could they do. They could not even feed themselves, and many died of hunger!

In pity for their helpless condition, Huber allowed those that remained alive just one servant to wait upon them, and she set to work very industriously and fed and saved the survivors. The poor maid-of-all-work was seen to build some cells, to attend to the little ones, and put all to rights.

The name of this ant is the Formica rufescens; but there is another of the same idle nature, called the Formica sanguinea, or the red ant.

Darwin says that his own antipathies to

UBER, the naturalist, discovered that slavery were so great, that when he heard of it among the brute creation he was most unwilling to believe anything so disreputable of them. Indeed, they are in many respects far better behaved than man. Reason often leads man wrong, but instinct always leads brutes right; and of all the points of difference between man and other animals, there is none more constant than this-that, shame to human nature! man is the only animal that can break the commandments. I would rather believe my horse than any one. It is no use my servant saying he did not stop with him at the public-house yesterday if the horse stops there to-day. No: man is the only creature that can either tell or act a lie; that is, put on a hypocritical expression, or look one thing while he means another.

> Accordingly, knowing that these, the red. ants were found in the southern counties of England, Darwin resolved on making his own observations, which he set about in a strong anti-slavery spirit.

> He proceeded to examine several nests of the red ants, and was struck with a very picturesque and a very significant difference between master and servant. The masters seemed to wear a fine red uniform, while the slaves were actually blacks, and not half the size of their masters. He observed also that these red ants are by no means as helpless as those before described. Moreover, as to the blacks, it seems a willing kind of servitude; for when the nest is disturbed they work with their masters to defend the nest, and carry the young to a place of safety.

> Darwin says that, as observed in Surrey and Sussex, the blacks are exclusively household slaves, doing no kind of out-door work; for he never saw one enter or leave the nest. The out-of-door work, such as collecting building materials, and attending to the victualling department, is all done by the masters, who, in these more important operations, may be seen very busy at all times. Thus, the red ants seem to carry slavery no further than to in-door or domestic service. But there is some reason to believe that their moderation in this respect is owing chiefly to the fact that the red ants

[#] If fertile.

cannot capture and bring into the house of | bondage quite as many blacks as the other tribe. This explanation was suggested because once, when Darwin found an establishment with an unusually large establishment of blacks, he perceived a few of them mixed with the red-coats about some out-door occupations. And among the ants in Switzerland, where the blacks are captured in larger numbers than in England, Huber says that some blacks are always told off for the out-of-door work, and that they alone are employed to open and shut up shop morning and evening; for, of course, the entrance to the nests must be very well guarded.

One observation is very puzzling.

Whereas with the other ants the slaves carry their masters, with the red ants the masters carry their slaves, when making a move from one establishment to another.

One day Darwin witnessed a regular slave-hunt—actually a slave-capturing expedition!

About twenty red-coats were seen lurking about the same spot, who, as they evidently were not foraging for food, Darwin naturally concluded were after no good, and he immediately suspected them of some kidnapping intention; accordingly he stood by and watched to see what was going to happen.

Presently there came along, looking very lively-poor things! they were in the plenary possession of their liberty-a party of blacks, unsuspectingly going about their own private affairs, without the slightest idea of ever working for other people. Immediately the villanous reds made an attack, which the said blacks as vigorously resisted. than once he saw as many as three of these little blacks-remember, they are not half as big as the enemy-hanging on to one of the great legs of an infamous red slaveowner. But, sad to say, might was too great for right; the reds had it all their own way, or nearly so; for, if they could not take the blacks alive, they took them dead, and carried their bodies to a nest twenty-nine yards distant as food for their bloody-minded wives and families. In this affray the reds captured none of the little ones which they usually rear as slaves; so Darwin practised s little deception on them. He dug some up from another nest, and put them down on the field of battle. In a moment the red-coats seized and carried them off into captivity, no doubt believing they had taken so many prisoners as the natural consequence of the fight.

Now, here we find something very much like a slave-making instinct. But Darwin thinks that, after all, there may be no such instinct in nature, and that this is only a modification of some other instinct. To find animals prey upon each other is common enough; but to make use habitually of the services of others is peculiar to these ants alone. We say habitually, because instances of what, at school, we call "fagging" have accidentally resulted in more cases than one.

It is related that a horse in a field found out the way to work up and down the handle of a pump. If this seems improbable, it is not more strange than for a cat (as we have seen) to leap upon a chair and try to turn the brass handle of a door; and many a cat will leap up to the iron handle outside a kitchen-door, clasp it with one paw, and with the other press down the iron, and thus lift up the latch. But the horse in question, having once displayed his pumping powers, was ever afterwards beaten by the other horses, and compelled to pump whenever they wanted water.

Now, it is well known that some instincts, even when modified, are hereditary. Habits which are a mere matter of acquirement and training in the parent become natural in the offspring; and if so, the progeny of these horses—always accustomed to the same mode of watering—might possibly have developed in their race a kind of instinct thus to avail themselves of the services of each other.

So Darwin suggests as probable (not as certain) that these ants originally were only accustomed to capture the pupæ as food; but as some of the said pupæ, before they were eaten up, might have become developed, and followed their proper nature in doing what was to be done in the nest in which they found themselves, the red ants might have acquired the habit of thenceforth capturing, for the sake of their services, the young blacks, whom they at first only thought of capturing for the sake of food.