

were apes or some other kind of four-footed beasts, (some scientists claim that man lost some advantages in assuming the upright position—that the valves in the veins are not placed right when a man stands erect but are right when he gets down on all fours—and the great prevalence of hernia is instanced as another of the ill consequences of man's assuming the walk of the gods, that they lived in trees or logs, and ate fruits or worms. That is easy to believe. But I am not obliged to stop just where these scientific men stop, am I? Can I not go little ahead of them if my brain lets me without a permit from either Mr. Pringle or Prof. Cook? Darwin's was a great mind, and he did wonders for his century, for all the centuries that are to be—but I am not going to pile Darwin's books about till I cannot see over, and when I am asked a question, look into them and if Darwin says "no" or *does not say anything in particular*, make my answer "no" or *not anything in particular*. Prof. Cook did not answer my questions at all—he simply wrapped his scientific mantle around them and laid them away on the shelf. He did a little better when Dr. Proctor asked him almost the same questions. I asked Prof. Cook then, and I ask him now, if it is possible to hatch out a queen bee without that rudimentary food gland. Every worker egg must be supplied with the nutriment that will congeal into all the necessary organs of the worker bee and as queen bees are hatched from worker eggs they are obliged to have this gland in some form, it is there and it cannot get away—will Prof. Cook please tell me how? Then if this gland is in the queen-bee because it cannot help itself, how can evolution have anything to do with it? Nothing at all. It seems to me that Prof. Cook cannot help seeing this, even if he is steeped ten times over in scientific books. Prof. Cook quotes Prof. Le Conte as saying, "It is as irrational to talk of evolutionist as it is to talk of quotationist." This quotation was not meant for me (I think) as Mr. Pringle seems to suppose, as the C.B.J. containing my reply to Mr. Pringle and the A.B.J. containing Prof. Cook's reply to Dr. Proctor are both dated March 7th (unless the proof sheets were forwarded to Prof. Cook.) I suppose it was thrown out as a general warning to everybody in general but no one in particular. And with all due deference to Prof. Le Conte, (and I bow low and speak with bated breath whenever I say the word Professor) I still cling to being an evolutionist. If I have newer and better thoughts to-day than I had yesterday, then I am an evolutionist. If I believe what I read on a subject, and then go ahead of what I read and add something to it out of my own brain, then I am an evolutionist. Or if I read, and *do not believe but evolve* a reason that is plainer than the one given, then I am an evolutionist. This is why I am more of an evolutionist than Prof. Cook is. Prof. Cook believes in the evolution theory as other men teach it; believes in it so much that he puts props under it, that it does not need, and thus teeters it over to the other side; but he does not go a hair's breadth beyond what the books say; he would lay aside his Professor's gown and resign his office sooner. Calling a man, or a hundred thousand men "irrational" proves nothing, anybody can call names.

MAHALA B. CHADDOCK.

From the British Bee Journal.

One Side Cell Comb Foundation.

UNDER the heading "A New Artificial Comb," we gave on page 7 of the B.B.J. for this year, a letter from M. Koerbs, respecting a new comb which he had discovered, and which he stated could not be used for brood-rearing, and also the remarks of Mr. Gravenhorst respecting it taken from the *Deutsche Illustrierte Bienenzeitung*. This announcement has, naturally enough, caused a great deal of talk, and many speculations and "guesses" as to what this artificial comb could be have been the result. The article was inserted after some correspondence with M. Gravenhorst about it, and a promise from M. Koerbs to send us a sample comb for inspection if we would keep the secret. This we consented to do; but, at the same time, pointed out that we did not consider the means adopted for making the invention public would be one that would commend itself to British bee-keepers, and that they would regard with suspicion a promise to send out a pamphlet only when a few thousand subscribers at 1s. 6d. each were obtained. How many thousands it was not stated. We also suggested that M. Koerbs would do better by selling the invention to some foundation maker, or take out a patent. Our suggestion has been acted upon, and now the invention is in the hands of M. Otto Schulz, of Buckow, one of the largest manufacturers of foundation on the Continent of Europe. In the meantime, the ball being set going, ingenious minds went to work, and not having any secret to keep, we, as well as others, had our own ideas of how a comb should be constructed to fulfil all the requirements set forth.

We were led to the ideas from our recollection of the behavior of our bees with the flat-bottom wooden base foundation, introduced many years ago by Mr. Abbott, and his proposal at the meeting on the 7th of April, 1881, to use these combs with wooden bases as dummies. In that year we had several such combs, and on some of them, strangely enough, the bees built regular cells only on one side, nibbling the wax on the other side and using it for making struts or braces at right angles to the board. This we found was because the board was not sufficiently covered with wax, there being more on one side than on the other. Bearing this experiment in mind, the thought occurred to us that if bees were induced to build combs only on one side and to lengthen the cells so that the queen could not lay in them, the desired result might be attained. We therefore prepared a drawing, and asked a manufacturer to make us some foundation on calico with cells on one side only. The