A Specimen of some Observations made by a Microscope, contrived
by M. Leewenhoeck in Holland, lately communicated by Dr.
Regnerus de Graaf.

The person communicating these Observations, by and
by to be delivered, mentions in a Letter of his, written
from Delph April 28, 1673, that one Mr. Leewenhoeck hath
lately contrived Microscopes excelling those that have been
hitherto made by Eustachio Divini and others; adding, that he
hath given a specimen of their excellency by divers Observa-
tions, and is ready to receive difficult tasks for more, if the Cu-
rious here shall please to send him such: Which they are not
like to be wanting in.

The Observations themselves.

1. The Mould upon skin, flesh, or other things, hath been
by some represented to be shot out in the form of the stalks of
Vegetables, so as that some of those stalks appeared with round
knobs at the end, some with blossom-like leaves. But I do
observe such Mould to shoot up first with a straight transparent
stalk, in which stalk is driven up a globulous substance, which
for the most part places it self at the top of the stalk, and is fol-
low'd by another globul, driving out the first either side-ways,
or at the top, and that is succeeded by a third and more such
globuls; all which make up at last one great knob on the stalk,
an hundred times thicker than the stalk itself. And this knob
indeed consists of nothing else than of many small roundish
knobs, which being multiplied, the big knob begins to burst
asunder, and then represents a kind of Blossoms with
Leaves.

2. The Sting of a Bee I find to be of another make than it
hath been described by others. For I have observed in it
two other stings, that are lodged within the thickness of the
first sting, each having its peculiar sheath.

3. Further
3. Further I observe, on the head of a bee before, two artus or limbs with teeth, which I call scrapers, conceiving them to be the organs wherewith the bee scrapes the waxy substance from the plant. Besides, I find two other limbs, each having two joints, which I call arms, wherewith I believe this insect performs its work and maketh the combs. Moreover, there is also a little body, which I call the wiper, being rough and exceeding the other limbs in thickness and length, by which I am apt to believe the bee wipes the honey-substance from the plant. All which five limbs the bee, when she doth not work, knows curiously to lay by close under her head, in very good order.

4. As to the eye of the bee, which I have taken out of the head, exposing its innermost part to the microscope; I find, that the bee receives her light just with the same shadow as we see the honey-combs: Whence I am prone to collect, that the bee works not by art or knowledge, but only after the pattern of the light received in the eye.

5. In a lowe I observe indeed, as others have done, a short tapering nose with an hole in it, out of which that insect, when it will draw food, thrusts its sting, which, to my eye, was at least five and twenty times less than one single hair. But I find the head every where else very close round about, and without any such futures as some have represented it. The skin of the head is rough, resembling a skin that hath many dints in it. In the two horns I find five joints; others having marked but four. One claw of her foot is of the structure of that of an eagle, but the other of the same foot stands out straight, and is very small; and between these two claws there is a raised part or knob, the better to clasp and hold fast the hair.

So far this observer: who doubtless will proceed in making and imparting more observations, the better to evince the goodness of these his glasses.