

RARE CASE OF
FILAMENTOUS OR ENTOZOOON
WORMS.

To the Editor of THE LANCET.

SIR,—In your Number for the 13th of May a correspondent, who signs himself a "CONSTANT SUBSCRIBER," solicits a reply to the following question:—"Is there a disease of the skin where living animals, or insects, are turned out?"

I would refer the inquirer to almost any of the works of generally accepted authorities on diseases of the skin, wherein he will find many of them that take their names from the very circumstance of the presence of organised living animalculæ, generated from larvæ deposited in the true skin and its tissues. The æstrus, for instance, so common in cattle and sheep, and which are recorded to inhabit the human body, by persons to whom every credence is due. The gordius, or guinea-worm, is another instance. Some mostly exist on the epidermis, but, nevertheless, penetrate its tissues and substance, as the pulex penetrans, the jigger of hot climates, the acarus scabiei, &c. &c. I will only allude to the numerous parasitic animalculæ so commonly attendant on various diseases of the surface, where the integrity of the skin is broken, where the health is broken down, and often from want of mere cleanliness.

I would now briefly relate a case, amply confirming that living animals do infest the human body; it is the only case of the kind I have ever seen, but it will, perhaps, be sufficient to satisfy your correspondent.

Nearly five years since a lady came to take the sulphur-fumigating baths in Great Marlborough-street. Having taken a sulphur fumigation, in the evening the female bath-attendant told me she had that day had a very queer case; that the lady thus spoken of, on coming out of the bath, was covered with hundreds of small worms, some nearly an inch long, which had continually kept jumping out of the skin whilst the lady was dressing. Although, from the respectability of the attendant, I ought to have placed more confidence in what she said, I hastily told her not to tell me such nonsense. The next day the lady had another fumigating bath, and a similar report was made to me, but more exaggerated in detail than the first report, and to which I again paid little attention. The lady had a third fumigation,—the same effect was produced, and again reported to me. After taking the fourth fumigation, the lady, hearing of my unbelief, requested my attendance in the dressing-room, to witness the fact. I then saw hundreds upon hundreds of these worms escaping from the skin of the legs, arms, and body; the carpet where she had stood whilst dressing was covered with them. They

kept jerking themselves from the skin—a sort of jumping—and they had the power of ejecting themselves to the distance of twelve to twenty inches, as nearly as I could guess. With a towel I wiped some of the parts myself, where I saw these worms projecting from the skin; some of them extended more than half an inch from the surface, and these, when approached by the towel or finger, ejected themselves out with considerable force; others, not more out than about a quarter of an inch, were broken off by the towel, wiping, and those that were only out about the eighth of an inch would retract themselves for a few seconds, and then again show themselves ready for and in progress of escape. On putting the towel on the table I was astonished to see it covered with these animals, that dropped from the folds of the napkin. They were, for the most part, about an inch in length, but there were others of various shorter lengths. They were pink in colour, and transparent, with dark brown heads, though the larger ones had the heads quite black; these appearances were amply distinct without a glass. In thickness they were about the size of a strong hair or bristle. During the few succeeding days I had an opportunity of showing some hundreds that I collected to several medical friends that called on me. I have some dozens by me still, of course much shrivelled, and looking like short black hairs. I shall be happy to show them to your correspondent, or any other medical gentleman curious on the subject.

The lady had but few fumigations, and I suppose got well. I never knew who she was, or who sent her to take the fumigations. The nature of the case, perhaps, with her governed this cautious reserve. The only time I saw the patient was the time I have named. She said she had been teased with these worms for more than two years. They were continually falling on the carpets, occupying the coverlid and bed linen. She had consulted several of the leading practitioners of the west end, some of whom she named, but had received no relief from what had been prescribed for her, and she attributed her ailment from having fallen asleep in the summer, when lying on the ground, near some stagnant water, and on waking found her mouth almost filled with something very like small worms. A short time afterwards she found her body infested with them, and they had until the time I saw her been continually on the increase.

I am aware that such cases as here related are not familiar to the profession, and have nothing more to offer as to the cause or nature of these entozoon worms, but would refer the inquirer to the appendix of Rayer's valuable "Theoretical and Practical Treatise on Diseases of the Skin," but perhaps more particularly to those naturalists and entomologists who have made this subject a principle

of inquiry, as Blainville, Etmuller, Bassig-
not, &c.; my object in this paper was merely
to state the few facts I am in possession of,
and which I myself witnessed.

JONATHAN GREEN, M.D.

Great Marlborough-street,
May 19, 1843.

* * We take this opportunity of saying
that the note of the correspondent referred to
at the commencement of this letter found its
way into print accidentally, the name which
was contained in the question and reply not
being intended by the editor to appear pub-
licly.

NEW MODE OF ADMINISTERING MERCURY,

AND THEORY OF ITS CHANGES IN THE
SYSTEM.

M. MIALHE is consider to have established
that all the preparations of mercury em-
ployed medicinally act by being changed in
the animal economy into the bichloride, to
the action of which preparation their thera-
peutic and toxicological effects are owing.
This chemical change is produced by the
alkaline chlorides present in the humours of
the animal frame. The proportion of bichlo-
ride thus formed is partly in correspondence
with the quantity of the alkaline chlorides
present; but partly also dependent on the
kind of mercurial preparation taken,—the
deuto-salts being at once converted into cor-
rosive sublimate, while the proto-salts pass
first into the state of proto-chloride, and only
attain their final composition and efficiency
by a secondary change. Finally, the bichlo-
ride of mercury forms, in conjunction with
the alkaline chlorides and the albuminous
materials of the blood, a chemical combina-
tion susceptible of traversing the whole vas-
cular system without appreciable altera-
tion.

Acting upon these data, M. Mialhe, in
order to place the animal system as early
and as certainly as possible under the influ-
ence of mercury, proposes the employment
of what he calls a normal solution of mer-
cury (*liqueur mercurielle normale*), and
which is composed as follows:—

R *Bichloride of mercury*, four and a
half grains;
Chloride of sodium, fifteen grains;
Muriate of ammonia, fifteen grains;
The white of an egg;
Distilled water, a pint.

Beat the white of egg with the distilled
water; filter; dissolve the three ingredients
in the fluid, and filter anew.

In an ounce of the above solution there is
consequently rather more than a quarter of
a grain of bichloride of mercury.—*Journ. des*
Coun. Med. Prat.

ON THE

MECHANISM OF ABSORPTION.

By GEORGE ROBINSON, Esq., M.R.C.S.L.,
Fellow of the Royal Medico-Chirurgical
Society, London.

IN a memoir which was read before the
Royal Medico-Chirurgical Society in Feb-
ruary last, I attempted to prove, by a series
of experiments, that a partial or complete
obstruction to the passage of the blood
through the smaller vessels of the body will
cause the escape of its albuminous portion
through their coats. In the present commu-
nication I wish to direct attention to the in-
fluence which the opposite condition of the
circulation exercises in promoting the ab-
sorption of any fluids that may be placed in
contact with the external surface of the
vessels, or only separated from them by one
or more membranes.

If we examine the facts brought forward
to illustrate the process of absorption, we
shall find that the following is, perhaps, the
only general conclusion that can be safely
drawn from them, viz:—

That no substance can exert any influence
on the whole system unless the circulation of
the blood, through the vessels of the part to
which it may be applied, is performed with
a certain degree of activity.

That the circulation of the blood must
precede and accompany the act of general
absorption is, among many other instances,
proved by the following experiments:—

1. Magendie divided all the parts of the
thigh of an animal but the femoral vessels,
and then inserted poison under the integu-
ments of the limb. While the vein was com-
pressed no symptoms appeared, but they
were immediately produced when the return
of the blood was unimpeded.

2. Emmert tied the abdominal aorta, and
introduced poison into a wound in the foot,
but at the end of seventy hours no effects had
appeared. The vessel being then liberated
the poison (prussic acid) acted within half
an hour. I have repeated the experiment
with precisely similar results. The aorta
being compressed, a few drops of a strong
solution of hydrosulphate of ammonia were
introduced beneath the integuments of the
thigh. At the end of seven minutes no
symptoms of poisoning had appeared, but on
then releasing the vessel the operation of the
poison was immediately evident, and the
animal was dead in less than a minute. A
number of similar facts might be adduced
in support of this point, but it will be suffi-
cient to refer for them to any modern work
on physiology.

This principle being established, we may,
in the next place, proceed to inquire how the
action of the circulation, in favouring ab-
sorption, is to be explained.

According to the laws regulating the