## News, Notes and Queries

#### REFERENCES

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## A POPULAR TREATISE ON TINEA CAPITIS, BY J. A. WELCH 1837

THE accompanying illustration shows the intriguing frontispiece of a book entitled A Popular Treatise on Tinea Capitis or Ringworm with a classification of the forms under which it manifests itself, a brief analysis of the theory of inflammation and infection and a description of a Medicated Steam Bath invented by the author for the treatment and cure of diseases of the Scalp by I. A. Welch, M.R.C.S., L.S.A., published in London. There is no date on the title page but the preface is dated 1837. The author's initials are given elsewhere in the book as J.A.

The book is flamboyantly dedicated to Sir Benjamin Brodie.

My dear Sir,

On the receipt of the last proof-sheet of the pages explanatory of my practical views in the treatment of TINEA GAPITIS, I hesitated, even upon the threshold of publication, convinced, that an unremitting attention to my private practice in a path hitherto comparatively untrodden, must ultimately obtain me a professional distinction to which I had not courage to think that my public claims as an author would ever advance me. The arrival of your kind letter from Paris has fixed my wavering purpose, and attached a value, even in my own estimation, to a literary effort honoured by the approval of Sir Benjamin Brodie.

Mystery, my dear sir, in the profession of any art or science, is but another term for weakness or ignorance; and though it may appear unnecessary for an author to disclaim empiricism, of whose work you have accepted the dedication, yet, in justice to so distinguished a Member of the Profession as yourself, I deem it my duty implicitly to state, anticipating the acknowledgement in the body of my work, that the mode of applying the local means acknowledged by the best authorities as essential to the treatment of Porrigo, in its various forms, through the medium of a vaporous agent, is the chief claim to novelty in the system of,

My dear sir,
Yours, very gratefully,
J. A. WELCH

The first part of the text is without interest. The illustrations are coloured and crude. It is in the final section that the interest in the book lies for it

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describes the use of the MEDICATED STEAM BATH for the treatment and cure of diseases of the scalp. It is accompanied by a diagram.

A reference to the accompanying plate will render the description which follows, perfectly intelligible.

The Apparatus consists of a Steam Boiler, from which projects the main conductor, a large brass tube ramifying into twelve smaller pipes, each terminating in a cylinder. Every cylinder contains a sponge, medicated in proportion to the urgency of the case, and removeable when a bath of simple vapour only is required. To each of these cylinders is attached a receiver for the condensed steam, which, falling to the bottom in the form of water, is let off by a tap, and the possibility of an overflow prevented. Supporters are affixed to the branches from the main tube, and insure the firmness of the whole.

The patient's head is placed in a cap, so constructed, as to prevent the slightest escape of the vapour. The cap is fitted at its apex to one of the cylinders by an elastic band, the whole perfectly air-tight. This arrangement does not occasion the patient the least restraint, but allows an uncontrolled facility of motion when submitting to the action of the bath. The cap, though compressible into a very small compass when not in use, is, by a peculiarly elegant adjustment of internal springs, rendered capable of such a degree of expansion, as to afford an area of two-and-a-half cubic feet for the collection of medicated vapour, thus brought into immediate action on the seat of disease. When fitted with a cap, the patient is placed in a reclining chair, which can be regulated to any required angle; the extremity of the cap is fixed (as has before been stated) to the cylinder, and the head is in a condition to undergo the process of the bath.

Each of the twelve branches has a stop-cock, by which the operator may regulate the heat, or, if necessary, instantly suspend the vaporous action. It is, therefore, manifest that the power of insulating each individual case gives the medical supervisor a discriminative control over all, the simplicity of the means conferring this power, preventing the possibility of embarassment or confusion. To speak summarily, a single patient may, on admission to the bath, constructed for the treatment of twelve, have administered to him the proportionate quantum of medicated vapour essential to his individual case; and twelve patients, submitted simultaneously to its action, would each experience the individual advantage which, during the same period, would have been derived from its effects by one.

The water, heated in the copper to the boiling point, flies off in steam, and rushing through the main conductor and its ramifications, passes into the cylinders containing the sponges saturated with the medicinal charges adapted, as the case may require, to the different patients, who may be each distinguished under a specific classification. The consequent heat disengages the component properties of the medicaments contained in the sponges, and causes their evolvement in a gaseous form. Two gases are therefore sent simultaneously into the caps worn by the patient; that arising from the medicated sponges being specifically heavier by many degrees than the mere aqueous vapour, and falling by the law of gravity, is caught in its descent by the projecting substance within the cavity of the cap, the head of the patient therefore becomes the recipient of the chemical agent employed by the medical director; the continued and uniform heat ensures its rapid and effectual absorption; and on removing the patient's cap, the effect exhibited in the clear surface, unclogged pores and generally healthful appearance of the scalp, will incontrovertibly demonstrate to all who witness the process, and are interested in the subject of these pages, the truth of the assertion that 'the mode of applying the local means', acknowledged by the best authorities as essential in the treatment of ringworm, has never before been practically brought to bear.

It is expressly stipulated on admission to the bath, that the patient must attend constantly and punctually at a certain hour daily until the completion of the cure (a period varying, according to the case, from a fortnight to six weeks). The observance of every necessary rule is thus enforced, and a counteractive prevented. The constant supervision of the diseases, in all its phases, by a medical man, is too obvious an advantage to be dwelt upon.

Many parents are prejudiced against external applications generally, and entertain a feeling approaching to alarm at a course which they dignify with the title of an operation. To such I

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have to offer the assurance that an inspection of the apparatus, any morning between the hours of nine and ten, will convince them that it has the most pleasing influence on the feelings of the twelve individuals undergoing the process described in the preceding pages. The perfectly unconstrained position in which they are placed, the cheerful conversation in which children, free from restraint, naturally indulge and the highly-luxurious sensation arising from the use of the bath, render the whole process so pleasing and agreeable, that the juvenile patients frequently request a prolongation of its sedative effects far beyond the allotted period; and they invariably anticipate with delight a repetition of their enjoyment on the ensuing day.

It will be noted from the frontispiece that the boys were very properly treated on one side and the girls on the other. Dr. Welch is clearly something of a showman and the visitors, presumably the anxious parents, do not seem unduly alarmed.

Dr. Welch ends his book with a case-note. To use his own words he 'subjoins an extract' from his note-book, illustrating it with a picture of the head of a girl with what appears to be a dozen or more large yellow plums in her hair, calling it 'Tinea Favosa or encrusted state of honeycomb ringworm after applications of gruel or starch'.

April 24th, 1837. Miss K.—, of Cheapside, admitted to the bath. Chronic case of Tinea Favosa, of four years' standing. Disease in its most rancorous and malignant state: the intire scalp covered with a mass of incrustation. Sub-cutaneous inflammation, manifest upon pressure of the scalp by the bladder-like fluctuation under the finger. The morbid secretions vented through the fissures of the incrusted scalp yielding a nauseous effluvium.

25th. Emollient effects of the bath unequivocally demonstrated: Incrustation removeable by scissors. On raising some of the indurated crusts, extreme depth of fissures visible in the direction of the portions of incrustation detached, presenting a bleeding surface.

Miss K— stated that she had, for months, been unable to lie on her pillow, but was compelled to sleep in an erect position, and that her night-cap was constantly saturated with the serous discharge, which was accompanied with an intolerable fetor. Bath applied; evident decrease of cellular inflammation. Diminished tension.

26th. Discharge much diminished. Night-cap little soiled. Disposition to incrustation still manifest.

27th. Discharge ceased; in other respects no alteration.

28th and 29th. Itching of scalp materially diminished. Night-cap perfectly free from stain. 30th. Tendency to desquamation exhibited.

May 2nd. Itching intirely subdued.

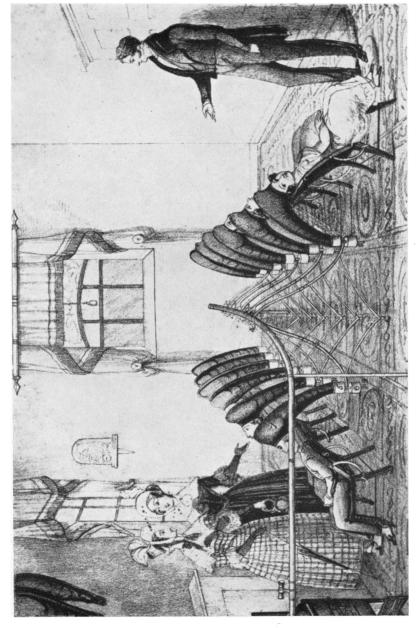
3rd, 4th, 5th, 6th, 7th and 8th. No retrogression. From the last date continued improvement till completion of cure.

#### Dr. Welch finally offers

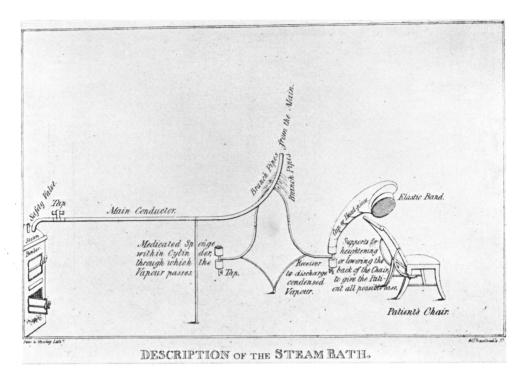
to put my notebook into the hand of any intelligent enquirer with the guarantee that upon the selection of a case under any particular name the residence of the party shall be instantly given him, together with a reference to the parents or guardians of the patient.

One thing Dr. Welch does not do. He gives no details whatever of the medicaments with which he soaks the sponges.

WILLIAM BROCKBANK



Tinea Capitis. Mr. Welch's apparatus for the cure of scald-head, ring-worm, and other diseases of the scalp.



In Tinea Capitis



Maccabaean Prize Medal.