

The portable Turkish hot air and vapour bath, as a remedial agent in the treatment of disease / by C. Hunter.

Contributors

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THE PORTABLE
TURKISH HOT AIR
AND
VAPOUR BATH,
AS
A REMEDIAL AGENT
IN THE
TREATMENT OF DISEASE.

BY C. HUNTER,
of Calcutta.

Price Fourpence.

Sole Agent—T. HAWKSLEY,
SURGICAL INSTRUMENT MAKER,
357 OXFORD STREET, LONDON, W.

LIST OF PRICES.

	s	d
Lamp Apparatus, for Vapour and Hot Air complete, with Mackintosh Cloak lined with Flannel, sleeves in front, spare Wicks, &c.	42	0

Lamp Apparatus, for Vapour and Hot Air complete, with Macintosh Cloak lined with Welsh Flannel, which may be easily removed for washing; sleeves in front, spare Wicks, &c.	63	0
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Lamp Apparatus, for Vapour	7	6
Ditto for Hot Air	7	6
Ditto for Vapour and Hot Air	10	6
Ditto Ditto in Copper	17	6
Single Flannel Cloaks each	14	0
Double Thickness Flannel Cloak ... ,,	20	0
Mackintosh Cloak, lined with Flannel, with Sleeves in Front each	35	0

Mackintosh Cloaks, 12 inches longer than the ordinary sizes, 5s extra.

Goat Hair Gloves for Shampooing, per pair	3	6
Goat Hair Belt, for Shampooing the Back	4	6
Gauze Cover, with hollow Tin tops, to use with Calomel, Sulphur, Iodine, &c. each	5	0
... per doz.	1	6



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THE PORTABLE
Turkish Hot Air and Vapour Bath, 1870

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H 94P

A REMEDIAL AGENT

IN

THE TREATMENT OF DISEASE.

INTRODUCTION.

It is the frequently expressed opinion of the most scientific medical men of the present day, that the skin covering the human body acts more powerfully upon the economy of the system of man than any other part. It is a sorry truth to state, that no part of the body usually receives such slight attention; so long as the surface of the skin is kept clean to *appearance*, it is considered to have received due and proper attention. But the office for which this external covering of the human frame was designed, was not merely for ornament, neither does the duty of its owner end with the periodical application of soap and water.

The Skin and its functions is truly a wonderful theme, and one which at present is little understood. Nay, in those greenheaded old times, near 3000 years ago, mankind had a livelier faith in the duties of the skin, in preserving health and eradicating disease, far more so than at the present time. Our skins have not altered a jot since the days of HIPPOCRATES or of SERGIUS ORATA, who understood "skin curing" long before the great Marsic war; yet, by a curious, if not a questionable, advance in civilisation, our skin

is shut up alike from light and air—treated *at times* to superficial ablutions, to soakings in warm water, and the application of chemicals in the form of soaps, to remove *actual, visible dirt*. Most curious, most questionable, must that civilisation be, which tries thus to effect a compromise with nature—which devotes enormous energy to *curing* disease, whereas one-half the power expended is capable of entirely preventing it. Has it never appeared to a reflecting mind how that the greatest modern discoveries in the successful treatment of disease, are but simple old-world ways pulled into life and use again?

There would be some show of reason for the multitude of experimental treatments of disease, if man's nature had much altered or was continually changing; but no, the beautiful economy and power of self-adjustment is given to each, the same now as in the beginning: disturb the one, or overload the other, and what wonder at disease making its appearance.

It is to help the skin, to properly perform its natural functions, which is the removal of the waste of the body—to make it a more perfect means of eliminating from the system diseases, many of which may fairly be ascribed to its inertness—that a due consideration of its office is urged upon the public, and to further assist this end a description is appended of an apparatus, called, for convenience, a PORTABLE TURKISH BATH, which, having been successfully used for some years, has established its efficiency as a curative agent of many diseases (by means of the skin) in such a manner as to require no further recommendation.

“Old age, or accident, *not disease*, should end our days.”

EFFECTS OF HEATED AIR AND VAPOUR ON THE SKIN.

It would be difficult to ascertain the precise relative action which the skin exerts upon each of the various processes that are constantly going on within the body. It is a fact, that if the skin of the body is covered by any impermeable substance, the person dies. This experiment has frequently been tried upon animals, with but one result—death.

When LEO the Tenth was made Pope, a beautiful child about three years of age was gilded all over to enhance the grandeur of the ceremony, by the symbolic representation of the Golden Age, but the poor little fellow died in three hours and a half, with all the ordinary symptoms of suffocation. Thus it is equally true that our health and life depend nearly as much upon the inspiration and expiration by means of the skin, as by the lungs. This wonderful communication existing between the air without and the body within, is carried on by many millions of pores or minute tubes, with which it is everywhere penetrated, which are liable to be affected in a multiplicity of ways. See how destructive to the body is the action of fever while the skin is dry, and what a welcome crisis it is considered when moisture reappears upon the surface. Again, observe the effect of the dry easterly winds upon the skin, so affecting it that hundreds dare not go into the open air, and have to lay up in consequence, while the weekly death-rate is raised by thousands. Many other instances might be brought forward, all tending to show that the skin of man is not merely a covering or case for protection alone, but, like the leaves of plants, is constantly throwing off refuse matter from the body, and supplying the invisible nourishment derived from *air, light and heat*. In health, this process is constantly

in action; in disease, it is either varied or retarded, and in some diseases, as fevers, it ceases altogether.

Our present state of "civilisation" (?) almost compels us to wear such an amount of clothing (and that of a kind which most excludes light and air), that, without frequent assistance, the skin cannot properly perform its functions. This cannot be too earnestly impressed upon every one. It is not of the *greatest* importance that we derive the full amount of nourishment which the skin is capable of giving, but it is of *vital* importance that the outpouring from the skin should be free and unrestrained; that the channels or pores should not be choked, or their exuded products allowed to remain on the surface until they become disagreeably odorous, instead of the beautiful, sweet smell of healthy human perspiration. There is only one efficient method of accomplishing this, viz.—by the exhibition of heated air or vapour to the whole surface of the body in the most convenient way practicable—it should be convenient, so as to invite frequent repetition.

The action of heat—by means of heated air or vapour of water, or steam (which is the most preferable way)—upon the surface of the body is in this wise:

1st.—The air around the body is slightly rarefied, and, consequently, its pressure decreased. This, acting upon the capillaries of the blood vessels, allows them to enlarge; thus bringing the blood in greater quantity to the surface of the body with a less expenditure of force from the heart. Dry cupping is a limited and severe application of the same principle.

2nd.—The oily or sebaceous matter which has exuded from the skin and is deposited on its surface becomes softened and fluid by the heat, and the orifices of the sweat ducts are thus left open and free to discharge their contents. This in many instances of the first application of heat they are slow to do, by reason of their being choked with sebaceous matter in a semi-solid condition.

As before observed, these sweat ducts are the means of communication between the atmosphere and the

body. They may be distinctly seen on the surface of the palm of the hand with a magnifying glass, as little depressions along the fine ridges or striæ with which the hand is covered, and in warm weather, or when the skin is hot and moist, these depressions look like minute specks of moisture. It has been calculated that there are distributed over the surface of the body from seven to eight millions of these fine tubes or pores, the orifices of which can only be seen, and that their united length exceeds 25 miles; at the same time exposing, collectively, a superficial area of about 15 square inches. It is this enormous and complicated system of drainage which in disease requires to act with greater freedom, and thus furnish the body with a ready outlet for its impurities. To this end it is popularly assumed that a warm water bath will perform a similar duty to that produced by heated air or vapour of water. It is difficult to imagine a greater error. The theory that a water bath is inefficient to restore the proper action of the skin, while a vapour of water bath, or hot air bath, cannot be excelled for the purpose, is founded on this principle—*that the human body is not so dense a substance as water, and, being porous, no sooner is it immersed in warm water than absorption begins to take place*, which is the very opposite intention of a bath, whether it is intended for cleanliness or as a curative agent. *The action must always be from within, outwards.* Hence, when the body is enveloped in heated vapour or air, and the perspiration has commenced to flow freely, *thirst* is felt, and it is good to drink abundantly of cold water, so as to assist and replace the outpour of the skin; while, on the contrary, every one knows that a water bath, either hot or cold, immediately assuages thirst. This shows the fallacy of expecting beneficial results from warm water baths, unless for gross uncleanness. Whoever felt refreshed after a soaking in warm water, unless vigorous exercise followed it to enable the skin to throw out its unnatural load of water? From this cause results the liability to take cold after a warm bath; the skin being damp, flabby and

inactive, is in the primest condition for the reception of any disorder.

On the contrary, after a vapour or hot air bath, nothing is more beneficial than a cold or tepid shower bath or sponge down, or even a roll in snow if possible, the reaction of the skin being productive of glorious sensations; at the same time its vitality, as well as that of the body, is so great as effectually to resist all external injurious influences. In some parts of Norway and Russia the vapour bath is much used by the peasantry as a curative agent. They obtain it by heating large stones in a wood fire, in a room appropriated for the purpose; when nearly red hot, cold water is thrown on, and is immediately converted into vapour. The bathers remain in this for some time, vigorously rubbing themselves and each other, either with the bare hands or thick goat-hair gloves. This is done frequently during the most rigorous part of their winter, and it is affirmed they are better able to withstand cold in consequence.

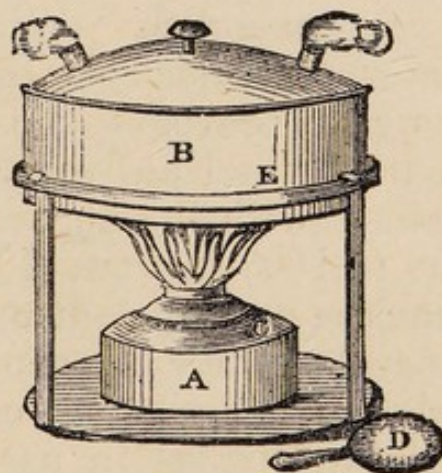
In the generality of private houses it is often inconvenient, if not impracticable, and at all times expensive, to have a room devoted expressly for the purpose of a vapour bath; and it frequently happens that one may be required while travelling, either to use at an hotel or private residence. To this end various expedients have been adopted; one of which is to place a kettle with water upon a fire (another inconvenience), having one end of an india-rubber tube attached to its spout, and the other end fixed under a chair, upon which the patient sits, while a servant places one or more blankets around him to confine the vapour. The steam issuing from the kettle is conveyed by the tube to within the blankets, and by it the patient is made *damp*, for what with the steam being condensed in its passage through the long tube, and the absence of heat within the blankets, little else can be said of its action; besides, the air surrounding the patient is never changed, owing to the absence of circulation, which it is impossible to obtain, unless the *source* of heat is within the enclosed space. Another and somewhat

hazardous makeshift is to heat a brick to redness, and immerse it in a bucket of water, over which the patient sits as before ; but this, from its momentary duration is not efficient, besides being inconvenient and decidedly unsafe. To obviate all these inconveniences, the apparatus about to be described was invented ; but, before proceeding with the description, it will be as well to remark that a long experience had suggested what were the essential requirements to render the invention as perfect as possible.

1st.—That the apparatus should be simple in its construction, safe in its action, not liable to get out of order, and the means of using it obtainable in all parts of the world.

2nd.—That it should be portable and supplied complete, *i.e.* with some appropriate means of enveloping the patient, so as to be free from trouble in preparation, or when used in travelling.

3rd.—That it should be capable of giving a vapour or hot air bath of half an hour's duration, so as effectually to meet the most severe cases requiring its application.



The result of these requirements will be more readily understood on reference to the illustration.

The apparatus stands five inches high, and is made of strong tin, riveted and soldered together. It consists of a lamp chamber A having one central tubular wick in communication with the spirit in the chamber A. The combustion of the spirit is rendered more perfect by the inner part of the wick being open

to the air by means of the holder upon which it is fixed, so that air is supplied to the flame from *within* as well as from *without*, thus producing a larger and more intense flame with less expenditure of spirit than by any other means. The Boiler B is for water (into which herbs, &c., may be placed if necessary),* and rests on the rim or frame of the apparatus E by means of three studs projecting from its sides. These studs, when placed opposite the three supports of the rim, allow the boiler to fit down on to the lamp, thus making it very portable and increasing its strength to resist violence when travelling. The steam or vapour issues from three short tubes in the lid of the boiler, and by this means is distributed more equally than if only by one aperture. By the addition of a gauze-cover (which is supplied if necessary) and putting aside the boiler, the apparatus forms an excellent Hot Air Bath. Hot air is daily becoming more used, and will probably be found, ere long, to be the most efficacious treatment. In the list of diseases treated by heat, those marked H. A. have been most successfully treated with hot air, and therefore it is recommended. With the hot air apparatus the waterproof cloak is the most efficient, as it most thoroughly prevents the escape of heat, while for vapour the flannel answers very well. The temperature obtained with the apparatus as a hot air bath is from 170° to 180° in from 10 to 15 minutes, whilst with vapour the maximum temperature is about 130° . The temperature may be regulated by adjusting the wick higher or lower as the case may require.

Fig. 2 shews the apparatus in use. The cloak or mantle for enveloping the patient, and supplied with the apparatus, is made of thick coarse flannel, having a hoop of cane round the shoulders to form a more

* In very obstinate inaction of the skin, a piece of camphor, about the size of a nutmeg, may be put into the boiler; this is a most effectual sudorific. The herbs usually used are rosemary, or poppies and camomiles. Vinegar and water, soda or salt and water, and sulphur water may also be used.

perfect chamber, an opening at the top admits the head, and is drawn closely round the neck by means of a tape.* Any ordinary cane or wooden-bottomed



chair will answer to sit upon. The lamp being lighted and placed underneath the chair, the bather seats himself, and puts on the flannel cloak, so adjusting it that the slit from the neck is in front, it can then be buttoned and tied close round the neck, while the hands are inside. Where convenient, it is better to use a foot pan with a little hot water in it, to protect the feet from the draught on the floor.

A gentle pleasant warmth is felt at first, the skin by degrees becoming gradually moist and soft, until the steam is up and blowing out of the three jets, when the whole of the space enclosed by the cloak is filled with heated vapour. An active circulation of both air and steam is felt to be taking place by the rapidity with which it issues from where the cloak is tied round the neck—thus exposing the body to a constant *renewal* of both vapour and air. This is of great importance, for unless such circulation takes place, the air within the cloak combines with the products of combustion.

The sensations experienced by the patient will usually determine the time advisable to subject the body to the influence of the heated vapour; about 15 minutes for each of the first three baths, 20 minutes for each of the three following, and 25

* For variety of cloaks, see priced list at end.

minutes or upwards for those after, is usually found an agreeable regulation. In some special cases the time may be extended to the full (viz., half-an-hour), but this is not advisable except on occasions of emergency. Upon emerging from the bath, if not taking the cold or tepid douche or sponge down, the patient should use a coarse towel, and with it rub down the body from neck to feet, or better still, with a pair of goat hair gloves. Goat hair, as a means of exciting friction on the skin, is preferred to any other material: it is soft and clean, and more resembles in its effects the skin of the human hand than anything else. The gloves supplied at the shops as Turkish gloves are very useless, being little better than a sponge after the first few times of using, and not at all calculated for the purpose of shampooing.

The diseases upon which this form of Bath has been most successful, are very numerous, and are often of a so-called chronic incurable character. The following is a list of the diseases upon which the action of the bath has been both immediate and efficient, judging from the gratifying testimonials received from time to time.

AGUE.—H. A.*

BRONCHIAL INFLAMMATION.—
V.

CONGESTION OF THE LIVER.—
H. A.

CONTRACTION AND STIFFNESS
OF JOINTS.—H. A.

CORPULENCE.—H. A.

DIABETES.—H. A.

DISEASES OF THE KIDNEYS.—
H. A.

TORPID LIVER AND ALL BILI-
ARY DERANGEMENTS.—H. A.

GOUT AND RHEUMATIC GOUT.
—H. A.

RHEUMATISM.—V. and H. A.

LUMBAGO.—V.

PARALYSIS.—V.

SCIATICA.—V.

CONTUSIONS OVER THE WHOLE BODY FROM FALLS WHILE
HUNTING.—H. A.

AFTER EXCESSIVE FATIGUE FROM HUNTING, SHOOTING, FISH-
ING, YATCHING, &c., AND ALL ILL EFFECTS FROM LONG
EXPOSURE TO COLD.—H. A.

SPRAINS OF JOINTS, &c.—V.

INDIGESTION.—H. A.

The above is a series of very common afflictions,

* H. A.—Hot Air } Refer to the nature of the bath usually
V.—Vapour } found successful.

the greater number of which may be *prevented* progressing by the timely application of heated air or vapour to the surface of the body; and where a disease has taken possession it may be either quickly removed, or the severity of its effects palliated.

The following is a list of diseases, &c., where the bath has been variably successful, but where it is in every case well worth a trial.

FIRST STAGES OF CONSUMPTION, PRODUCING IMMEDIATE CESSATION OF THE DISTRESSING NIGHT SWEATS.

DROPSICAL ENLARGEMENT OF THE LEGS AND ABDOMEN.—H. A. MARSH, JUNGLE, AND OTHER FEVERS.—H. A. and V.

RHEUMATIC FEVER.—V.

PNEUMONIA.

The following is a leader from the *Daily Telegraph*, 7th February 1870 :—

“ What is the greatest among the petty annoyances of life? We come to the point at once and answer emphatically—a cold in the head, existence becomes a question of sneezing or wishing to sneeze. The sneeze indeed may be a momentary luxury, but it is dearly bought. With vague waiting for a sneeze to come, which finally culminates in a delicious “ah-tchoo” is not a pleasant condition of affairs: A cold in the head then is the most serious of petty annoyances, but a real cold attended with fever, shivering, sore throat, and what not is far from being a petty annoyance; it is one of the most formidable evils of human life in our cold, humid northern climate. The undertaker is so frequently the gentleman who is called in at the termination of “only a bad cold,” that any one who can point out to us how bad colds can be avoided and cured, is a benefactor to his species, in latitude 52 N. Such an one is Dr. Thomson, who recently delivered, at the Gresham College, a lecture upon the subject of “Catching Colds.” This was just about the time when Professor Tyndall was lecturing at the Royal Institution on “Dust,” and teaching us how we could avoid the danger of infectious disease, by the simple

process of wearing a Respirator of Wool or Cotton. The prevention of "Colds," Dr. Thomson tells us, is mainly accomplished by keeping the skin in a healthy state; but the question is, having caught your cold, what are you to do with it? The point is, immediately to bring back vigorous circulation, and exhalation from the skin. In the first place pop yourself at once into a Turkish Bath, a Vapour Bath or a Hot Air Bath of one sort or another. Then administer stimulants, but do not be led astray by the word.

By stimulants Dr. Thomson means, in the first place, concentrated food in dilution, such as "Essence of Beef." By no means fly to strong drinks. On the contrary—barring the aforesaid "Essence of Beef"—do not drink anything at all—not even water. "The remedial action through the skin does its work by drawing away the superabundance of the circulating fluid from the overcharged part." Your business then is to withhold supplies of watery ingredients from the blood. "Diminution of drink, sustained at the point of moderate persistent thirst, is the most certain and powerful preventive of congestive disorder, and the most sure remover of undue internal susceptibility which can be adopted. Surely if Dr. Thomson be in the right—and he is a gentleman of no inconsiderable repute in his profession—here is a simple method of dealing with a bad cold. In plain English it may be stated thus; as soon as you have caught a cold, take at once a Turkish or Vapour Bath. Take moderate doses of concentrated "Beef Tea," do not drink any thing else, save just a mouthful or two of liquid, to save yourself from too great suffering. You can scarcely go wrong—keep yourself at thirsty point, and it will be well with you. There is the more need of being careful in this matter, seeing that the more often you take cold, the more likely you are to take cold again. Each cold brings with it increased susceptibility of the internal membranes to congestive derangement. So, then, fix in your own mind the Bath establish-

ment to which you will fly in case of need ; make up your mind to a few hours of thirst, and you may set common colds at defiance."

The Bath should never be used immediately after a meal, but either before or at least two hours after. For Liver Complaints the middle of the morning is the most favourable time for its use, followed immediately with a cold douche, or sponge down with cold or tepid water, and afterwards a short walk. After rubbing down with a coarse towel or the goat hair gloves, the patient need not haste to dress or retire to rest, as the exposure of the skin to the air, if but for a short time, is very advantageous. If the bath is taken at night, before retiring, the douche or sponge down is not necessary.

An occasional inconvenience is sometimes felt after the bath by those who have only used it once or twice, viz. a slight headache, but its extreme rarity renders it almost unnecessary of mention. It may be most effectually prevented by placing round the forehead, resting on the top of the ears, a twisted napkin or towel, which has been dipped in cold water ; the ends should cross at the nape of the neck and there rest. The usual effect after the bath is a delightful sensation of elasticity and vigour. The cause of the headache is to be attributed to remaining exposed to the heat for too long a period during the first few baths, but in no case has it been permanently attendant after each bath.

A very popular fallacy is, that profuse perspiration is *weakening*. The best reply to this supposition is a reference to the men engaged at gas works, to the puddlers in the manufacture of iron, to the sugar bakers, and japanners, &c., all of whose daily labour is of the severest bodily description ; stripped to the waist, the perspiration pours off in such quantity as often to make quite a pool at their feet, yet these men are examples of the perfection of health and strength ; they have no encumbering fat, are free from colds,

and nearly every disease. Again, it is well known how gymnasts, pedestrians and oarsmen, induce profuse perspiration while training, and yet they do not lose their strength or limit their powers of endurance.

These instances would seem conclusive that perspiration, however profuse, is not in any way weakening, but, on the contrary, favours the perfect action of all the bodily functions, and tends to produce longevity, by the simplest of all natural means—a
HEALTHY SKIN.

DIRECTIONS FOR USING THE APPARATUS.

The Boiler B, which should be removed out of the frame E, is effected by turning the three small studs, which project from its sides opposite the uprights of the frame: it can then be lifted out and nearly filled with hot or cold water. Then remove the cover of the lamp C and pour into A sufficient Methylated Spirits or Spirits of Wine to three parts fill it, replace the cover, and trim the wick until it projects above the level of the wick holder. Replace the boiler so that the three studs rest on any part of the frame E, as shown in the figure; the lamp may then be lighted, and by the time the patient is undressed the apparatus will be ready to use. The advantage of using warm water in the boiler, is, that steam is more quickly generated and time saved. Everything being prepared, the patient seats himself on the chair, under which the apparatus is placed (a cane-bottomed chair answers the purpose best), and envelopes himself and the chair in the cloak, provided with the apparatus, tying it closely round the neck and buttoning the slit in front; this is readily done while the hands are inside the cloak. A glass of *cold water* should be taken at the commencement of the bath, and one or more during the process, the perspiration being rendered more profuse by this means. The second figure shows the relative position of the patient and apparatus when taking the bath.

In using the apparatus for a Hot Air Bath the lamp is to be trimmed as above, the gauze cover put over it and then placed beneath the chair; if a gauze cover is not supplied, light the lamp and place it between the legs in front of the chair.

Use the extinguisher D to put the light out at the end of the bath, and on *no account* permit the lamp to burn after the water has evaporated from the boiler. Commence by using the bath for about 15 minutes each time, after the steam is up, for the first three times, 20 minutes for the next three times, and so on increasing until, if necessary, the full time of half-an-hour is reached. This regulation of time may be set aside in such cases where immediate effects are required, or where the patient is strong and robust. If the goat hair gloves are used it should be on emerging from the bath and while the body is covered with perspiration, or, if a cold douche or sponge down follows the bath, dry the body and use the gloves after. It is needless to add that a servant is of great assistance in this latter operation.

"OLD AGE OR ACCIDENT, NOT DISEASE, SHOULD END OUR DAYS."

ELASTIC FABRICS, &c.

MANUFACTURED BY

T. HAWKSLEY,

357 OXFORD STREET, LONDON.

THE manufacture of these materials has now reached a high state of perfection, and the beneficial results obtained from their wear is universally acknowledged.

By their aid, artificial muscles are formed, ligaments are strengthened, and the skin, which through debility becomes loose and flaccid, is restored to its healthy condition.

The use of stockings, knee caps, anklets, &c., is like the application of a new skin, renewed strength is at once apparent, and it is possible to fit the material to the limb so accurately, and to adjust the pressure so carefully that no inconvenience will be felt by the wearer.

If a joint, as for example the knee, ankle or wrist, be weakened through a sprain or disease, the gentle pressure produced by the elastic material gives immediate relief and support.

The articles are made both in silk and cotton material, stout and strong where firm support and great durability are required, thin and delicate where support and comfort are sought after.

Although four or five different sizes of each article are kept in stock, ready made goods are chiefly recommended for temporary use or to meet an emergency, and it is most advantageous to have everything made to measure. We thereby ensure that the requisite amount of pressure is brought to bear on the proper points. In adjusting a stocking, for instance, the pressure should be greatest at the foot, and should gradually lessen towards the knee. Being made to measure is important both in the treatment of a case and as regards the wear of the article, which should not be unduly stretched. All elastic fabrics will clean ; they should be first soaked in cold water, then well rubbed with curd or ordinary soap, dipped again in cold water, and rolled up and squeezed like a sponge. The soaping and squeezing to be repeated until they are quite clean, then rinse them two or three times in cold water, and hang up to dry in the air. They must not be rubbed as in ordinary washing, and not wrung to get out the water, neither must they be washed in warm water nor put to dry before a fire or in the sun.

After washing, they should be examined for any threads that may have slipped ; these should be made fast, and holes should be darned in the usual manner. By following these directions, the articles will last for a great length of time and will give every satisfaction.

On application, a 24 inch measure will be sent, post free, for taking sizes accurately, and all measurements, &c., are preserved for future reference.

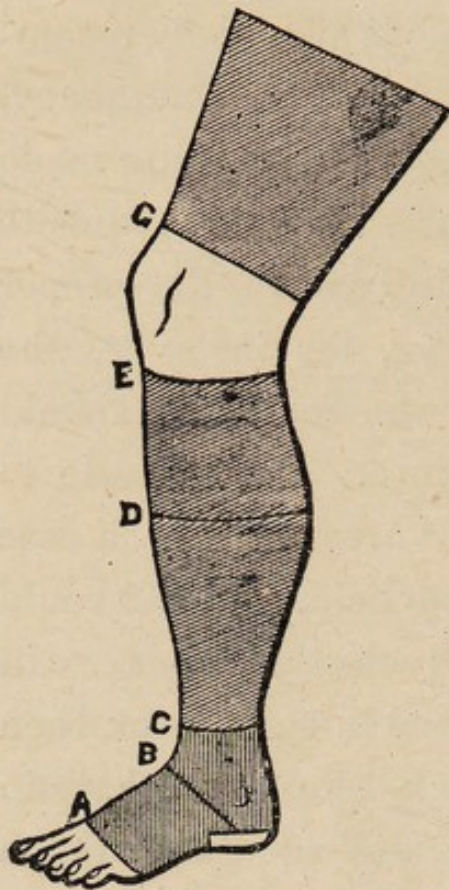
Fig. 1.
H

Fig. 1. Measurements required for a stocking, circumferences at A.B.C.D.E.; length from E. to sole of foot.

PRICE :—EACH

Cotton - 5/ 7/6 10/6 and 15/

Silk - 7/6 10/6 15/ and 21/

For a thigh piece, circumferences at G. and H.; length, from G. to H.

PRICE :—EACH

Cotton - 5/ 7/6 10/6 and 15/

Silk - 7/6 10/6 15/ and 21/

Fig. 2.

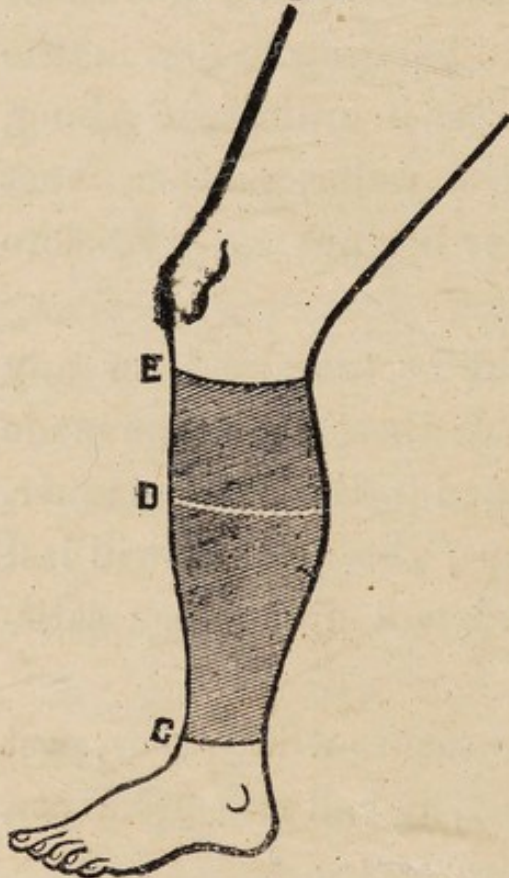


Fig. 2. For a legging, circumferences at C.D.E.; length from C. to E.

PRICE :—EACH

Cotton - 4/ 6/6 9/6 12/6

Silk - 6/6 9/6 15/ 21/

Fig. 3.

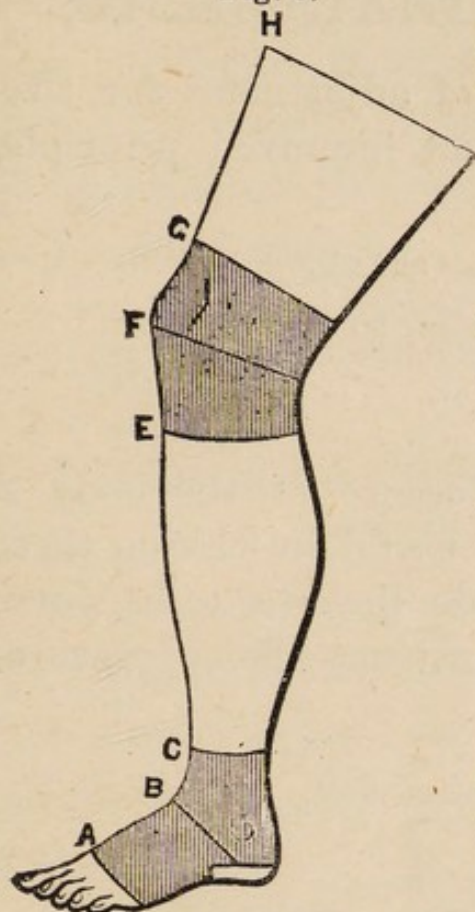


Fig. 3. For a knee cap, circumferences at E.F.G.; length from G. to E.

PRICE :—EACH

Cotton - 4/ 6/6 9/6 and 12/6

Silk - 6/6 9/6 15/ and 21/

For an anklet, circumferences at A.B.C.; length from C. to sole of foot.

PRICE :—EACH

Cotton - 4/ 6/6 9/6 and 12/6

Silk - 6/6 9/6 15/ and 21/

Fig. 4.

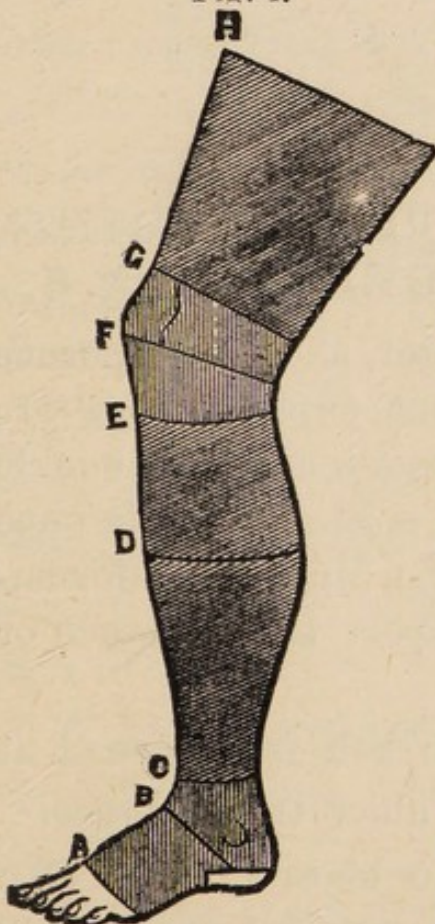


Fig. 4. For a knee stocking, circumferences at A.B.C.D.E.F.G.; lengths from sole of foot to F. and from F. to G.

PRICE :—EACH

Cotton - 10/6 15/ 21/ and 25/

Silk - 12/6 17/6 25/ and 31/6

Fig. 4. For a thigh stocking, circumferences at A.B.C.D.E.F.G.H.; lengths from sole of foot to F. and from F. to H., and say if for *right* or *left* leg.

PRICE :—EACH

Cotton - 12/6 15/6 21/ and 31/6

Silk - 21/ 31/6 42/ and 63/

A finer and more expensive quality of silk fabric is made to order.

LADIES' ABDOMINAL BELTS,

To lace at back and capable of adjustment for size. Made of fine linen, and on an improved principle, with elastic insertions.

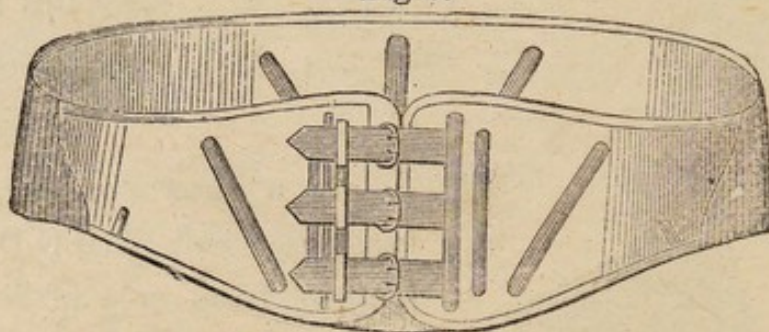
Prices 21s, 31s 6d, 42s and 63s.

Ladies' Belts, all elastic, to pull on.

Cotton	...	...	...	...	15s to 42s
Silk	...	...	...	...	21s to 63s

Size required, the circumference of the body 2 inches below the hips. It is useful in making these belts to know for what purpose they are to be worn, and for special cases further instructions for measurement may be obtained.

Fig 5.



GENTLEMEN'S HUNTING, RIDING, AND ABDOMINAL BELTS. Fig. 5.

These belts are lighter, stronger, and more porous than any others, give excellent support, and are worn with comfort. They are made either to buckle or button. The size required is the circumference of the body two inches below the hips, and information should be given if to support the abdomen or to strengthen the loins.

If for the latter purpose, the belt is deepened at the back, well stiffened, and moulded to the figure.

All who have a tendency to obesity, or are of a corpulent habit of body should wear a belt. It will

reduce the adipose matter in the abdominal region, and facilitate physical exertion. To all who ride, either necessarily, or for pleasure, the use of a properly adjusted belt will remove the contingency of any form of rupture.

Prices, 21s, 31s 6d and 42s.

Belts lined with flannel, catskin, &c., extra.

CHOLERA BELTS AND WATER COMPRESSES.

Cholera belts are chiefly used in hot climates, and by many professional men are thought to be a useful protection against attacks of Cholera, &c., to which travellers, or residents in tropical countries, are susceptible.

Their beneficial action rests in keeping the abdomen warm, in maintaining an equable temperature, and thereby obviating the danger of sudden chills. Their use will ward off the troublesome summer diarrhoea, which sometimes prevails in England, and this is a desirable advantage to those liable to its attacks.

The Water Compress consists of a belt of flannel, lined with an impervious substance, and to this is loosely attached the folded material, which has to be soaked in hot or cold water previous to its application to the body.

Water compresses have been successfully used for Rheumatism, Liver complaints, Chronic Vomiting, &c.

Vide the late Sir Ranald Martin, C.B.

SPINAL WEAKNESS AND CURVATURE.

The ill effects resulting from the above may be considerably mitigated, and are often permanently cured, by the timely use of a support, devised to remove superincumbent weight from the spine. This may be effected in several ways, as, for instance, by affixing light spring supports to ordinary stays, or by a spring steel support accurately fitted to the body. The support is but a few ounces in weight, and does not in the slightest manner impede the free movement of the body. It is not perceptible in use. In slight cases, or for delicate constitutions, curvature of the spine may often be very successfully treated without the use of steel in any form, but by traction bandages, which are carefully adapted to the body.

Prices from 42s.

Improved braces for round shoulders, stooping, and weakness of back. These braces produce an immediate effect upon the figure and do not raise the shoulders, like those generally in use. They afford great support to the back and spine, and are not perceptible through the dress.

Prices 10s 6d, 15s and 21s.

Directions for measurement forwarded on application.

ANKLE SUPPORTS.

When from weakness of the ligaments or any other cause, the ankle joint shows a tendency to fall inwards or outwards, there is an excellent contrivance for counteracting this failing, made in the form of a spring, which is inserted in the boot, and so adjusted as to press upon the joint.

By means of the support thus given, the weakness is soon corrected, and immediate relief experienced. For measurement the distance from the joint to the sole of the foot is required, and a pair of laced boots should be forwarded. Should the boots have been worn *no measurement is necessary*.

For flat feet thin metal arches are supplied, which restore the arch of the foot to its natural curve. They may be worn in any boots without any fitting whatever. For measurement, the outline of the feet on paper only is required.

Neither this instrument, nor the one for the ankle joint, are visible in walking.

WRISTLETS

Of elastic silk or cotton will be very advantageous in cases of sprained wrist, and also for strengthening the wrist of pianists, writers, oarsmen, cricketers, &c., also elastic mittens to include the thumb, back of the hand and wrist.

These may be had in various colours. The size required is the circumference of the wrist, and state the exact locality of the sprain or weakness.

Where strong support is required, it is advisable to have a leather wristlet, which should either lace, button, or buckle.

Price of Wristlet in cotton, from 1/6

Ditto ditto in silk, „ 3/6

Wristlet with thumb piece (as mittens) in cotton, 5/; in silk, 7/6; in leather, 5/, 7/6, 10/6.

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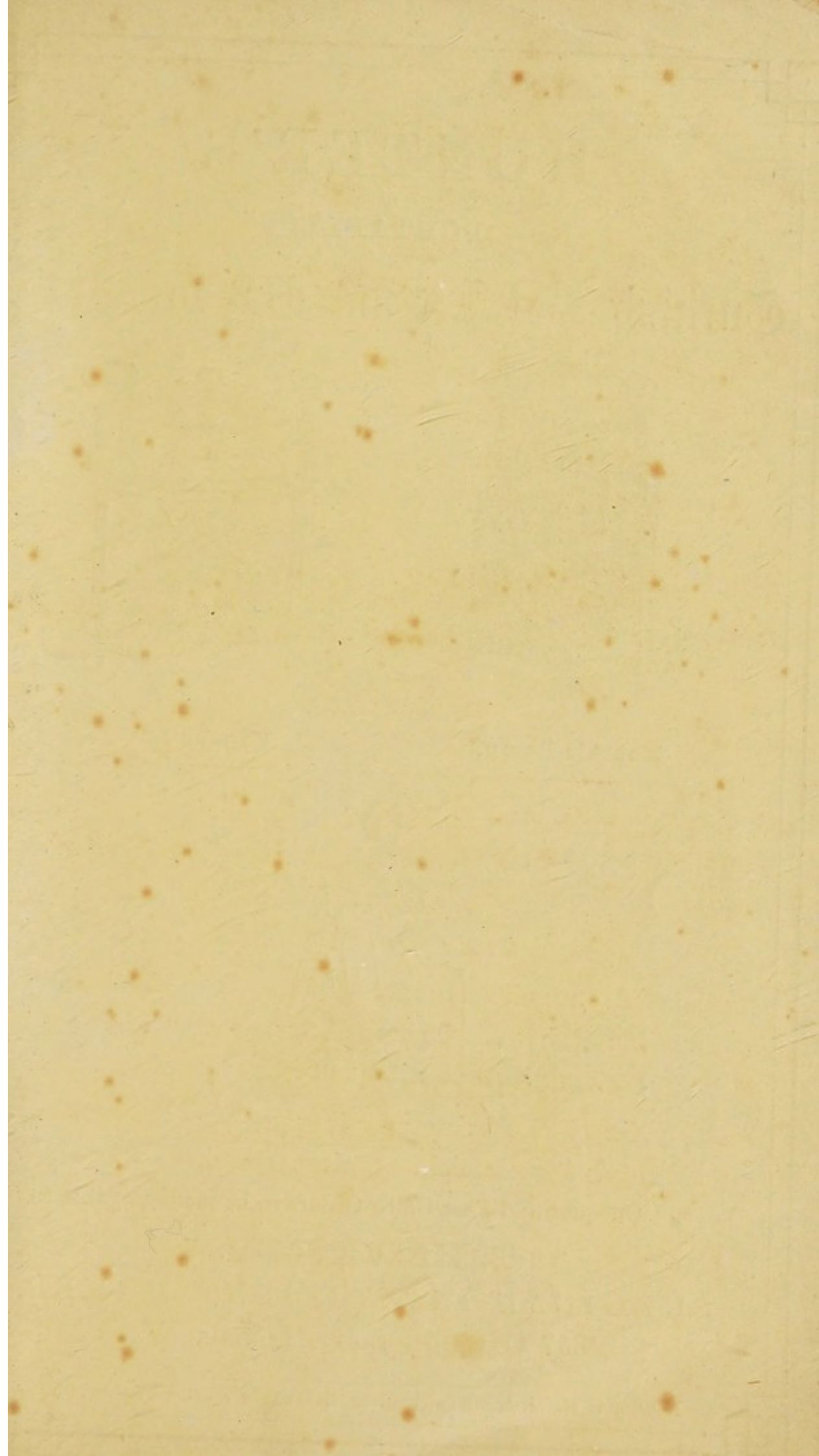
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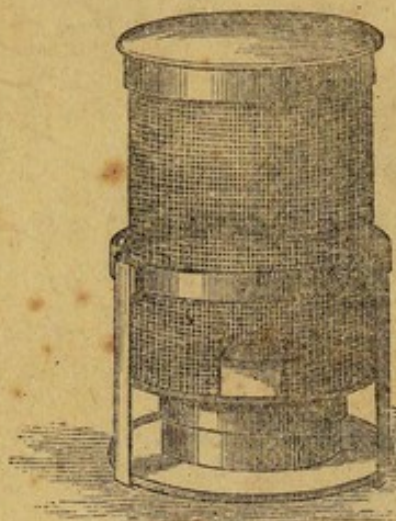
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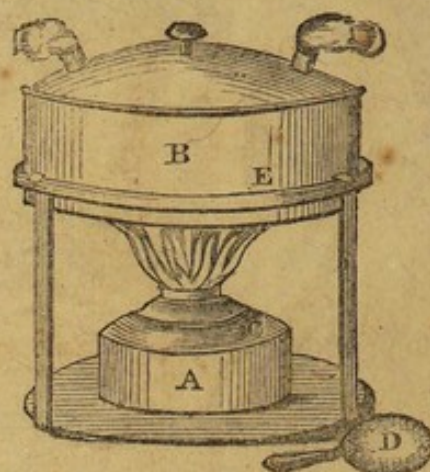
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Turkish Hot Air and Vapour Bath.



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