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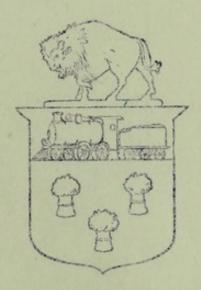


#### SOUVENIR

### B. M. A. & C. M. A. MEETING

WINNIPEG

1930

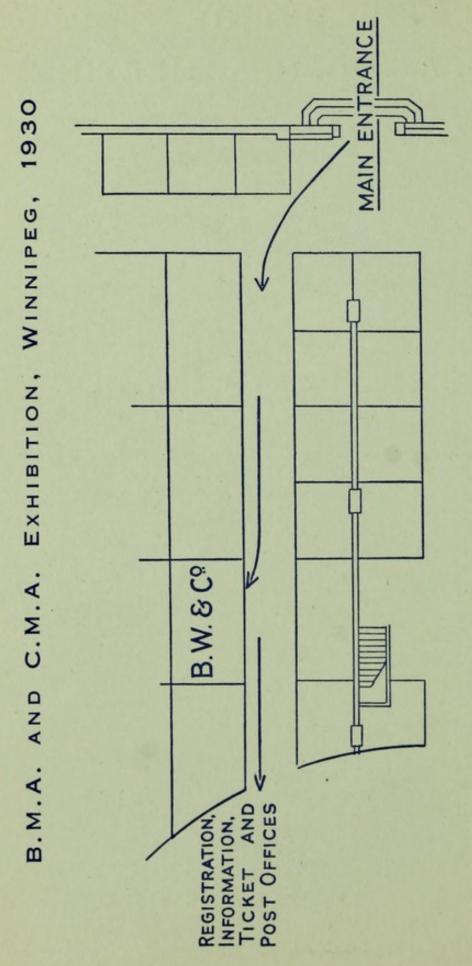


ARMS OF CITY OF WINNIPEG

WELLCOME COLL. WELLCOME & CO. /294

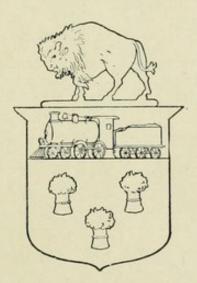
nted in England

# WELLCOME COLLECTION



Plan of the B. M. A. and C. M. A. Exhibition, The Winter Club, Winnipeg. Showing position of the Burroughs Wellcome & Co. Exhibit

### SOUVENIR B.M.A. & C.M.A. MEETING WINNIPEG 1930



ARMS OF CITY OF WINNIPEG



#### BURROUGHS WELLCOME & CO.

THE WELLCOME FOUNDATION LTD.

GOVERNING DIRECTOR - HENRYS. WELLCOME DEPUTY-GOVERNING DIRECTOR-GEO. E. PEARSON (BRITISH-FORWERLT U.S.A.)

LONDON (ENG.)

Associated Houses:

NEW YORK

SYDNEY

CAPE TOWN MILAN

BOMBAY

SHANGHAI

BUENOS AIRES

AND 643, CRAIG STREET WEST, MONTREAL

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#### FOREWORD

A FEATURE of the Burroughs Wellcome & Co. Exhibit at the Winnipeg Meeting of the British Medical Association and Canadian Medical Association is a series of large scale photographs of the causative organisms of important diseases, coloured to indicate the microscopic stains used in preparing the original slides. Associated with these organisms are the medicaments employed in modern medical practice in the treatment of the diseases which the organisms cause (see pages 5–18).

Amongst other features of note are products derived from Animal and Vegetable sources, such as 'Infundin' Pituitary (Posterior Lobe) Extract, 'Diginutin,' etc., with which Burroughs Wellcome & Co. are particularly identified as the result of original work (see pages 27 and 30).

'ERNUTIN,' the synthetic Ergot (see page 25), represents another phase of Burroughs Wellcome & Co. pioneer research work, as also does 'Wellcome' Brand Concentrated Anti-Gas-Gangrene-Globulins (see page 34).

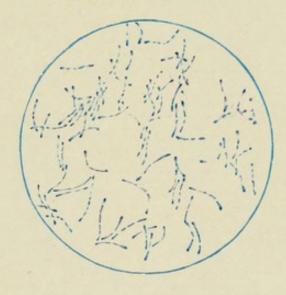
Particular attention is directed to the series of dioramas illustrating the utility of first-aid and medical equipments in exploration, travel, commerce and sport.



## PRODUCTS OF PARTICULAR AND TOPICAL INTEREST

- The following products exhibited separately are of particular and topical interest:—
- 'ERNUTIN,' a chemically-standardised preparation presenting the active therapeutic principle of ergot—Ergotoxine together with 'Ergamine' and 'Tyramine' (page 25).
- ERGOTOXINE ETHANESULPHONATE, a new salt of the alkaloid (page 25).
- EPHEDRINE, an alkaloid for use in Asthma and Hay Fever (page 28).
- 'DIGINUTIN,' a stable solution of the total glucosides of Digitalis leaf (page 27).
- DIGITALIS LEAF, possessing high activity and uniformity (page 26).
- Schick Test Products, for the diagnosis of Diphtheria (page 5).
- DIPHTHERIA ANTITOXIN-GLOBULINS, CONCENTRATED (page 7).
- 'ALEPOL.' The Sodium Salts of a Selected Fraction of the Fatty Acids of Hydnocarpus Oil, for use in the treatment of Leprosy (page 18).
- THYROXINE (Natural and Synthetic), the active principle of the Thyroid Gland (page 32).
- IRRADIATED ERGOSTEROL, presenting Vitamin D, for clinical trial in the treatment of Rickets (page 19).
- ANTI-GAS-GANGRENE-GLOBULINS CONCENTRATED (W)—(B. welchii=B. perfringens) (page 34).
- 'IODICIN,' a calcium salt of iodo-ricinoleic acid—for use in the general conditions in which iodides are indicated (page 36).

#### DIPHTHERIA



BACILLUS DIPHTHERIE
Stained with 'Soloid' Methylene Blue

AMONG the most notable of the advances recorded in recent years is the Schick Test for determining whether individuals are susceptible or immune to diphtheria.

A test injection is made into one arm and a control injection into the other, and, according to the nature of the reaction, it is possible to determine, with a marked degree of accuracy, whether the Schick subject is immune or susceptible to infection.

Further, in the case of persons subject to diphtheria, it is possible, by injecting diphtheria prophylactic, to secure a high percentage of immunity, as is shown by the Chart on page 6.

#### Preparations

'Wellcome' brand Diphtheria Toxin for Schick (Trade Mark) Test, with Control [# B. W. & Co.]

Capillary Sets (Control and Undiluted Toxin)

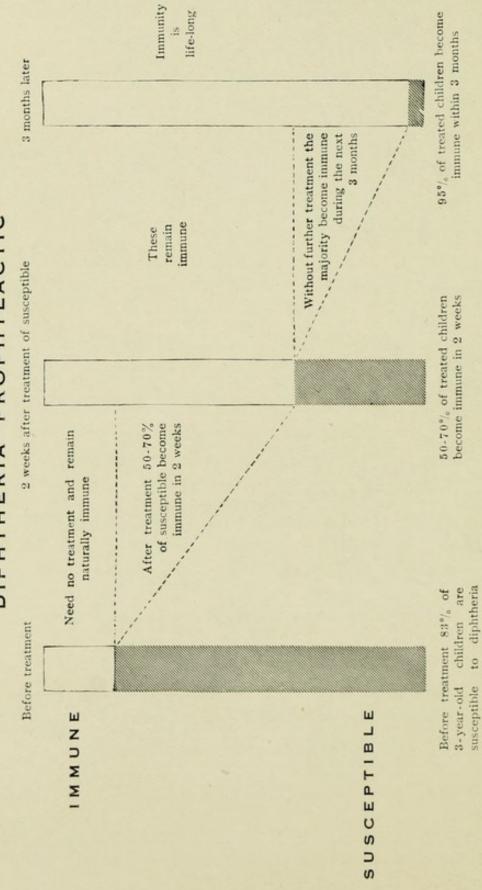
'WELLCOME' BRAND DIPHTHERIA PROPHYLACTIC T.A.M. (Trade Mark)

Toxoid-Antitoxin Mixture for Active Immunisation

[# B. W. & Co.]

1 c.c., 10 c.c., and 25 c.c. rubber-stoppered bottles

# WITH RESULTS OF INJECTING CHILDREN DIPHTHERIA PROPHYLACTIC



DIPHTHERIA ANTITOXIN.—Anti-diphtheritic Serum was introduced in 1894, in which year The Wellcome Physiological Research Laboratories were founded. It was from this source that the first supplies of the Serum were sent to America. By eliminating from the serum proteins which have no antitoxic value, a large reduction of volume in relation to unit value has been made possible without affecting the physical properties of the serum in such a way as to make it less easily absorbed. At the same time, the elimination of the useless proteins diminishes the tendency to produce the incidental symptoms, rashes, etc. In the production of 'Wellcome' Brand Concentrated Diph-THERIA ANTITOXIN-GLOBULINS a great elimination of useless proteins has been secured, and the reduction of volume, though considerable, has not been carried to such a length as to render the product viscid and thereby delay absorption. The original concentration was 1000 units in 1 c.c. or less. but recent progress has permitted the production by The Wellcome Physiological Research Laboratories of a Diphtheria Antitoxin of much higher concentration.

#### Preparation

'WELLCOME' BRAND CONCENTRATED DIPHTHERIA

(Trade Mark)

ANTITOXIN-GLOBULINS [35] B. W. & Co.]

Phials containing 1000\*, 2000\*, 3000\*, 4000†, 5000†, 6000†, 7500†, 8000†
and 10,000 † Ehrlich Units

\* 1000 units or more per c.c.; † 1500 units or more per c.c.

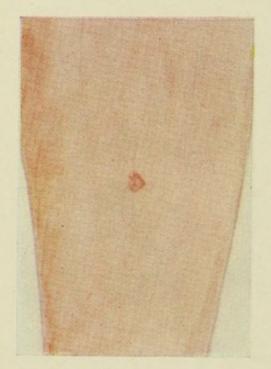
Phials containing 10,000; Ehrlich Units (High Potency)

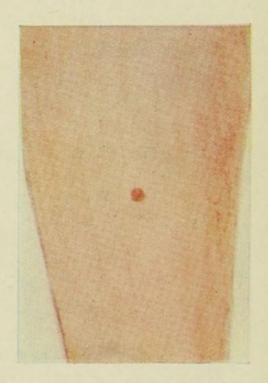
2500 units or more per c.c.



# SCHICK TEST FOR SUSCEPTIBILITY TO DIPHTHERIA

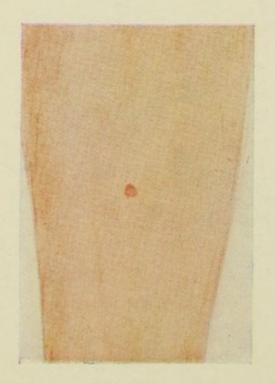
(See pages 5 and 6)





Control

NEGATIVE REACTION = IMMUNE





Control

POSITIVE REACTION = SUSCEPTIBLE

# SCHICK TEST FOR SUSCEPTIBILITY TO DIPHTHERIA

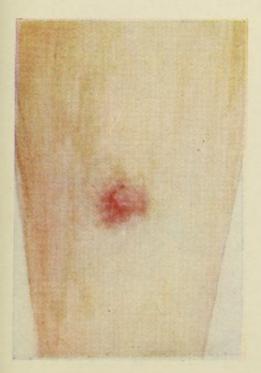
(See pages 5 and 6)





Control

PSEUDO AND NEGATIVE = IMMUNE

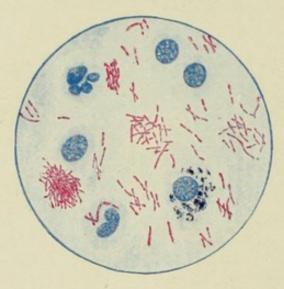




Control

PSEUDO AND POSITIVE = SUSCEPTIBLE

#### TUBERCULOSIS



BACILLUS TUBERCULOSIS (Hominis) in Sputum

Stained with 'Soloid' Fuchsine (Basic) and 'Soloid' Methylene Blue

DIAGNOSIS and treatment of tuberculosis centre around Tuberculins, a wide range of which is prepared at The Wellcome Physiological Research Laboratories, Beckenham, Kent (Eng.). Clinicians of experience still have wide

Diagnosis and treatment of tuberculosis Clinicians of experience still have wide differences of opinion as to the tuberculin they prefer for the treatment of patients; the absence, however, of any laboratory support for the choice of any particular

tuberculin, and the lack of agreement amongst physicians after about two decades of use of these various preparations, suggest that most of these tuberculins will eventually fall into disuse, and that only the two varieties included below will remain in use in human medicine.

OLD TUBERCULIN, HUMAN (T), the tuberculin first introduced by Koch, for a time fell into disrepute as a therapeutic agent because the doses originally recommended were harmful. As an aid to diagnosis, however, it continued to be used, and for this purpose is still the preparation always employed. In modified doses, as indicated by further experience also, it is still used for the treatment of tuberculosis.

NEW TUBERCULIN (B.E.)—Having come to the conclusion that Old Tuberculin immunised only against the soluble toxins of the tubercle bacilli, Koch experimented with the view of obtaining a tuberculin which should produce immunity to the organisms themselves. New Tuberculin (B.E.) consists of an emulsion of one part of dry pulverised tubercle bacilli in 100 parts of distilled water, to which 100 parts of glycerin are added. Bacillary Emulsion is analogous to other vaccines consisting of sterilised emulsions of bacteria, and may be supposed to act in the same way.

Testing and Standardisation of Tuberculins.— All Tuberculins issued under the 'Wellcome' Brand are carefully tested for sterility and freedom from toxins; the exotoxic tuberculins are tested for potency.

#### Preparations

'WELLCOME' BRAND OLD TUBERCULIN, HUMAN (T)
(Trade Mark)

[# B. W. & Co.]

Rubber-stoppered bottles containing 1 c.c. and 5 c.c. of Undiluted Old Tuberculin, Human, for dilution by the user

'Wellcome' Brand Tubercle Vaccine, Human— (Trade Mark) Bacillary Emulsion (B.E.)

[# B. W. & Co.]

Rubber-stoppered bottles containing 5 mgm. tubercle bacillary substance in 1 c.c., or 25 mgm. bacillary substance in 5 c.c., for dilution by the user

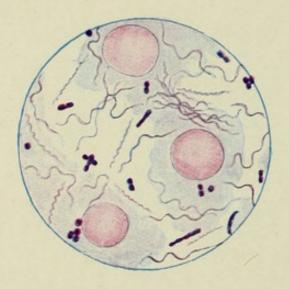
Cod Liver Oil is a valuable dietary adjunct in Tuberculosis.

#### Preparation

'KEPLER' COD LIVER OIL WITH MALT EXTRACT
(see pages 19-24)



#### SYPHILIS



TREPONEMA PALLIDUM AND SPIROCHETA REFRINGENS
Smear preparation from Hard Chancre
Stained with 'Soloid' Essin-Azur

The value of intramuscular bismuth medication in syphilis is now well-established. A finely-divided suspension of pure metallic bismuth is considered to be the ideal medicament, and 'Hypoloid' Bismuth Metal suspended in Sterile Isotonic Glucose Solution (see below) satisfies the most stringent tests for the effective introduction of pure metallic bismuth into the tissues. There is less risk with bismuth than with arsenic, and it is of special value in those cases intolerant of arsenic. By alternating bismuth and arsenic, the course of treatment is shortened.

#### Preparations

'Hypoloid' brand Bismuth Metal, 0.2 gramme
(Trade Mark) [gr. 3 approx.], in 1 c.c. [# B. W. & Co.]
Suspended in Sterile Isotonic Glucose Solution.

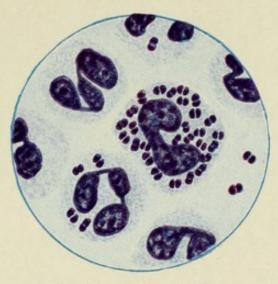
No. 556—Rubber-capped bottles of 5 c.c. No. 557— ,, ,, ,, 10 c.c. No. 559— ,, ,, ,, 25 c.c.

'BICREOL' BRAND BISMUTH CREAM [ B. W. & Co.] (Trade Mark)

Contains 0.15 gramme metallic Bismuth per c.c. in a creo-camph basis.

Pots containing & oz. and 2 oz.

#### GONORRHCEA



Gonococcus in Pus Stained with 'Soloid' Thionin Blue

'NIZIN,' a zinc salt of sulphanilic acid, solves the problem of an efficient but non-irritating and non-toxic antiseptic for use in genito-urinary and ophthalmic work. 'NIZIN' is efficient and yet non-irritating and non-toxic in the strengths recommended for use.

Anti-gonococcus Serum, 'Wellcome' brand, is prepared from strains of gonococci obtained from urethritis and gonorrhœal conjunctivitis. Specially indicated in generalised gonorrhœal infections, such as gonorrhœal rheumatism and endocarditis.

GONOCOCCUS VACCINE, 'WELLCOME' BRAND, prepared from the *Micrococcus gonorrhææ*, is useful in the chronic and later stages of gonorrhæa, in gonorrhæal prostatitis, and in generalised gonorrhæal infections, such as gonorrhæal arthritis.

Preparations

- 'NIZIN.' A zine salt of sulphanilic acid [# B. W. & Co.]

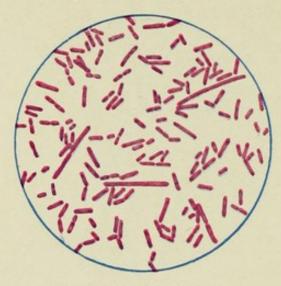
  (Trade Mark) Bottles of 1 oz., 4 oz. and 16 oz.
- 'SOLOID' BRAND 'NIZIN' (Trade Mark), gr. 2 [0.13 gm.]; (Trade Mark) and gr. 20 [1.296 gm.] [ B. W. & Co.] Gr. 2, bottles of 100 and 500; gr. 20, bottles of 25
- 'WELLCOME' BRAND ANTI-GONOCOCCUS SERUM
  (Trade Mark) Phials containing 25 c.c. [# B. W. & Co.]
- 'WELLCOME' BRAND GONOCOCCUS VACCINE
  (Trade Mark)

  [M B. W. & Co.]

  Hermetically-sealed phials of 1 c.c. containing 5, 20, 200 and 1000 million organisms in each c.c.

Also supplied, to special order only, in self-sealing rubber-capped bottles of 10 c.c. and 25 c.c.

#### TYPHOID FEVER



BACILLUS TYPHOSUS
from a young culture
Stained with 'Soloid' Fuchsine (Basic)

The efficiency of typhoid vaccine in prophylaxis was amply confirmed by the experiences of the military medical services of all the Great Powers of Europe during the late War. Under the influence of anti-typhoid inoculation, typhoid fever, instead of being, as in every previous war, one of the most common and most fatal of war diseases, became comparatively rare and unimportant.

Typhoid vaccine is now being tried as a curative agent in typhoid fever, and some good results are claimed by using, at intervals of from 4 to 7 days, a dose of 100–300 million organisms.

Clinical reports show that anti-typhoid serum has been used with some measure of success in the treatment of typhoid fever, and as a prophylactic.

#### Preparations

'WELLCOME' BRAND ANTI-TYPHOID VACCINE
(Trade Mark)

B. W. & Co.]

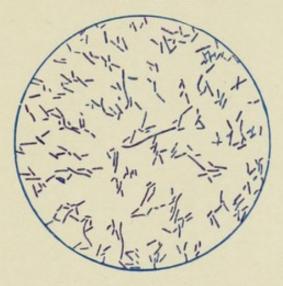
Phials of 1 c.c. containing 500 million organisms, and 1 c.c. containing 1000 million organisms; also in self-sealing rubber-capped bottles of 10 c.c. and 25 c.c., to special order only

Several mixed Typhoid Vaccines are also supplied.

'WELLCOME' BRAND ANTI-TYPHOID SERUM
(Trade Mark) [M B. W. & Co.]

Phials containing 25 c.c.

#### INFLUENZA



BACILLUS INFLUENZE
Stained with 'Soloid' Thionin Blue

Considerable progress has been made in the prevention and treatment of influenza by the use of Vaccines.

Influenza Vaccine, Mixed, 'Wellcome' brand, contains B. influenzæ, pneumococci and streptococci. Though it is by no means certain that its injection protects against the onset of influenza, it is probable that it causes the development of some immunity against the organisms causing the pulmonary complications.

#### Preparation

'WELLCOME' BRAND INFLUENZA VACCINE, MIXED (Trade Mark) [58 B. W. & Co.]

1 c.c. phials containing 400 million B. influenzæ, 200 million Pneumococci and 80 million Streptococci; also in 10 c.c. and 25 c.c. self-sealing rubbercapped bottles, to special order only

QUININE and ACETYLSALICYLIC ACID are among other medicaments used in the treatment of influenza.

#### Preparations

'TABLOID' BRAND QUININE HYDROCHLORIDE, gr. 1

Trade Mark) [0.065 gm.]; gr. 2 [0.13 gm.]; gr. 3 [0.194 gm.];
gr. 4 [0.259 gm.]; and gr. 5 [0.324 gm.] [ B. W. & Co.]

Each strength (plain or sugar-coated) in bottles of 25, 100 and 500

'TABLOID' BRAND 'EMPIRIN' Acetylsalicylic Acid, gr. 5 (Trade Mark) (Trade Mark) [0.324 gm.] [# B. W. & Co.]

Bottles of 12, 25, 100 and 500

# PNEUMONIA

DIPLOCOCCUS PNEUMONIÆ Stained with 'Soloid' Gentian Violet and 'Soloid' Gram Iodine Solution

STRYCHNINE, STROPHANTHUS and DIGITALIS are outstanding medicaments used in the treatment of pneumonia. 'TABLOID' products are of special interest by reason of their proved activity, reliability and accuracy of dosage.

#### Preparations

'TABLOID' BRAND STRYCHNINE SULPHATE, gr. 1/60 (Trade Mark) [0.00108 gm.]; gr. 1/30 [0.0022 gm.]; gr. 1/20 [0.0032 gm.]; and gr. 1/15 [0.0043 gm.] [35 B. W. & Co.] Each strength in bottles of 100 and 500

'TABLOID' BRAND STROPHANTHUS, min. 2 [0·118 c.c.]
(Trade Mark)

Bottles of 100 and 500 [ B. W. & Co.]

STROPHANTHUS TINCTURE (B. W. & Co.) (Physiologically Standardised) [ & B. W. & Co.]

Conforms to the standard of the Canadian Food and Drugs Act.

Bottles of ½ fl. oz., 1 fl. oz. and 1 lb. (18 fl. oz.)

'DIGINUTIN' AND 'TABLOID' BRAND DIGITALIS LEAF (Trade Mark) (Trade Mark) (see pages 26 and 27)

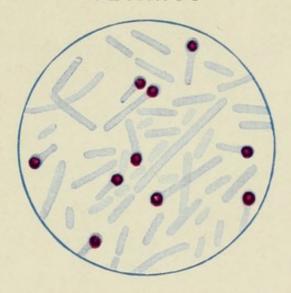
PNEUMOCOCCUS VACCINE, containing strains of the main types of the *Diplococcus pneumoniae* (Weichselbaum), is used in pneumococcic infections of all kinds, pneumonia, empyema, pericarditis, endocarditis, septicæmia, meningitis and pneumococcic infections of the joints.

'WELLCOME' BRAND PNEUMOCOCCUS VACCINE
(Trade Mark)

[58 B. W. & Co.]

Phials of 1 c.c. containing 10 million organisms, and 1 c.c. containing 50 million organisms; also in self-sealing rubber-stoppered bottles of 10 c.c. and 25 c.c., to special order only

#### TETANUS



BACIDLUS TETANI
showing spores
Stained with 'Soloid' Fuchsine (Basic)
and 'Soloid' Methylene Blue

The value of Tetanus Antitoxin, especially as a prophylactic, was most conclusively demonstrated during the war. The mortality percentage was reduced by prophylactic inoculation to less than half that of previous campaigns. Incidence of tetanus among the wounded was also reduced. Great quantities of 'Wellcome' brand Tetanus Antitoxin were supplied and war used during the war. The British War experiences Office Committee for the Study of Tetanus recommended that all wounded men should receive a primary injection at the time of the wound, a second injection in seven days, and a third and fourth at as nearly as possible the same interval of time.

#### Preparations

#### For Prophylaxis

'WELLCOME' BRAND CONCENTRATED TETANUS ANTITOXIN-(Trade Mark) GLOBULINS [55] B. W. & Co.]

Phials containing 1000\* International Units (= 500 American Units), , , , (=1500 , , , ,

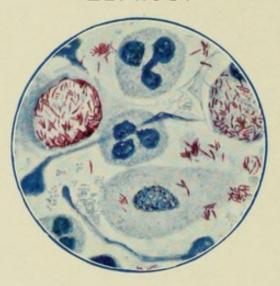
\*1000 International Units or more per c.c.

#### For Curative use

'WELLCOME' BRAND CONCENTRATED TETANUS ANTITOXIN(Trade Mark) GLOBULINS [# B. W. & Co.]

Phials containing 20,000 International Units (=10,000 American Units)
3000 International Units or more per c.c.

#### LEPROSY



BACILLOS LEPRÆ IN NASAL SECRETION
Stained with 'Soloid' Fuchsine (Basic) and 'Soloid' Methylene Blue

As THE outcome of extensive investigations, dating from 1904, Burroughs Wellcome & Co. have originated and issued preparations which have revolutionised the treatment of leprosy.

These preparations are now in use extensively in leper colonies throughout the world and many reports of good results obtained are being received.

An exceedingly valuable consequence is that for the first time in the 3000-year-old history of leprosy large numbers of lepers are coming forward for treatment voluntarily in the early and more amenable stage.

Administration is made by the intramuscular or intravenous route.

#### Preparations

'ALEPOL.' The Sodium Salts of a Selected Fraction of (Trade Mark) the Fatty Acids of Hydnocarpus Oil.

[# B. W. & Co.]

Bottles of 25 grammes and 100 grammes

'MOOGROL' BRAND MIXTURE OF ESTERS OF ACIDS OF (Trade Mark) THE CHAULMOOGRIC SERIES [# B. W. & Co.]

Bottles of 25 c.c., 100 c.c. and 1 litre

'AVENYL' (2-Myristoxy-mercuri-3-Hydroxybenzaldehyde) [# B. W. & Co.]

For use in leprosy complicated by syphilis.

Tubes of 1 gramme

#### RICKETS

THE value of cod liver oil in the treatment of rickets has been established by clinical results obtained in practice extending over a long period of years.

From being empirical, this treatment has now become established on a definite basis by reason of the discovery that good cod liver oil is rich in Vitamin D, which has a definitelyproved anti-rachitic action.

The essential, in making choice of a cod liver oil preparation, for use either in the prevention or in the cure of rickets, is to know that it is rich in Vitamin D. So far as 'Kepler' Cod Liver Oil is concerned, this certainty is established, not merely by the records of many years' clinical experience, but by the fact that it has been since 1923 specially tested for its vitamin content.

Comparatively recently another source of Vitamin D has become available, in Irradiated Ergosterol, which is particularly valuable for supplementing the action of cod liver oil in advanced and intractable cases of Ergosterol rickets, when, as is always desirable, the progress of the disease should be arrested as quickly as possible.

It should not be overlooked that when the normal diet is lacking in Vitamin D it is almost certain to be lacking in Vitamin A also. Cod liver oil supplies this deficiency as well as that of Vitamin D, and, as the only readily available source of Vitamin A which the clinician possesses, it should always be administered in rickets, whether supplemented with Irradiated Ergosterol or not as circumstances may demand.

'TABLOID' BRAND IRRADIATED ERGOSTEROL is issued in two strengths: 0.15 milligramme and 1 milligramme. Two milligrammes of Irradiated Ergosterol, daily, have been shown to cure rickets rapidly.

#### Preparations

'TABLOID' BRAND IRRADIATED ERGOSTEROL, 0.15 milli-(Trade Mark) gramme [0.00015 gm.]; and 1 milligramme [0.001 gm.] [# B. W. & Co.]

> 0.15 milligramme, tubes of 25 and bottles of 100 1 milligramme, bottles of 25 and 100

(For 'Kepler' Cod Liver Oil preparations, see page 23)

## FEEDING TEST OF THE VITAMIN D

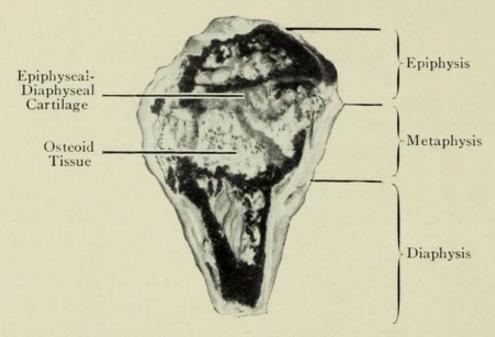


FIG. 1.—Femur of rat fed on rickets-producing diet consisting of patent flour and salts (Sherman and Pappenheimer 84). The cut face of the bone has been stained with silver nitrate. The black deposits indicate areas of calcification. There is no calcification of the provisional zone of cartilage, and the preosseous tissue (osteoid) is produced in abnormal amount and remains uncalcified. A wide rachitic metaphysis absent from normal bone is formed, composed of blood vessels, connective tissue, osteoid tissue and isolated pockets of degenerated cartilage cells.

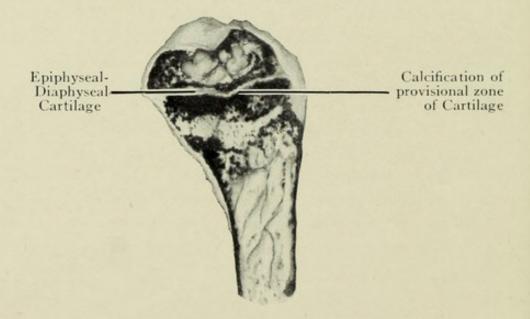


Fig. 2.—Femur of rat fed for the same time as Fig. 1 on the same rickets-producing diet, but with the addition during the last three weeks of 0.01 c.c. of 'Kepler' Cod Liver Oil each day. Healing is commencing and normal calcification of the provisional zone of cartilage is taking place.

'Kepler' Cod Liver Oil has been tested for its Vitamin content since 1923

#### VITAMINS



THE importance of the vitamin content of the diet, whether in health or disease, has received concentrated attention during recent years. The result has been the presentation to the medical profession, and also direct to the public, of a number of new products for which very optimistic claims have been made.

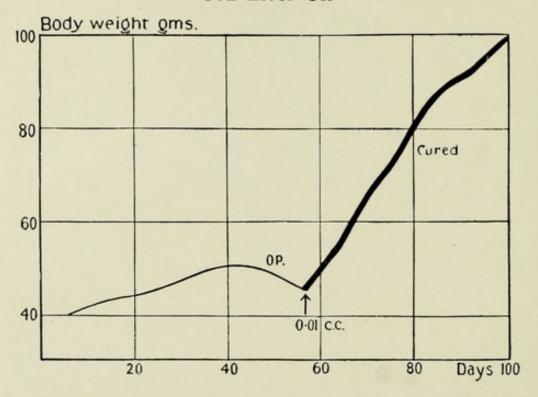
It is, however, perhaps of some importance not to overlook the fact that preparations of rich vitamin content have been available and have been used with pre-eminently satisfactory results for a great number of years. Their use was dictated by the successful therapeutic effects which were observed to follow their administration.

It is true that the actual reasons for the therapeutic value of these products were not known and that their use was empirical. The researches of recent years have shown that their virtue depended on their vitamin content. It is satisfactory thus to observe that the reputation of good cod liver oil and malt extract has been vindicated and even more firmly established by modern discovery.

The charts printed on pages 22 and 24, and the feeding test illustrated graphically on page 20, definitely establish the fact that 'Kepler' Maltextract and its combinations with 'Kepler' Cod A, B and D Liver Oil present the physician with the means of supplementing the diet of infants, invalids and the aged with Vitamins A, B and D.

It is not possible to deal with the whole aspect of the vitamin question in these short notes, but a booklet, entitled "Natural Sources of Vitamins," has been prepared with the

## Feeding Test of the Vitamin A content of 'Kepler' Cod Liver Oil



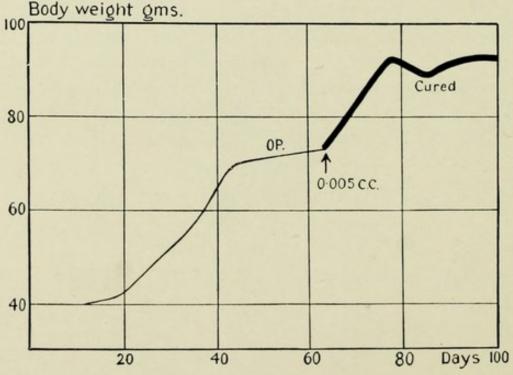


Fig. 3.—Up to the arrow the rats were kept on a diet deficient in Vitamin A, but containing Vitamin D in the form of irradiated ergosterol and Vitamin B in the form of yeast extract. At the arrow, were added to the diet 0.01 c.c. and 0.005 c.c., respectively, each day, of 'Kepler' Cod Liver Oil, with resulting increased growth. Each of these animals developed xerophthalmia at the points marked OP, which disappeared at the points marked cured.

object of presenting to members of the medical profession an account of the available knowledge on the subject in some detail. The booklet deals with the history of early vitamin investigation up to the discovery of Irradiated Ergosterol and then describes in some detail "Natural Sources of each vitamin under separate headings. Vitamins" Some interesting remarks and generalisations are made in connection with modern diet and the book concludes with a summary of the rational therapeutics of cod liver oil.

'KEPLER' MALT EXTRACT is prepared solely from the finest malted barley. It presents maltose and Vitamin B together with the ferment diastase, phosphates and albuminoids and is absolutely free from alcohol. In addition, it is particularly valuable as a vehicle for nauseous medicaments.

'KEPLER' COD LIVER OIL WITH MALT EXTRACT presents the finest cod liver oil so associated with the malt extract as to form a palatable combination of very agreeable flavour. It is rich in Vitamins A, B and D and is the ideal dietary adjunct in cases of specific disease as well as in conditions of general vitamin deficiency.

#### Preparations

'KEPLER' MALT EXTRACT [ B. W. & Co.] (Trade Mark)

Bottles of two sizes

'KEPLER' COD LIVER OIL WITH MALT EXTRACT (Trade Mark) [34 B. W. & Co.]

Bottles of two sizes

For combination with Chemical Food, Glycerophosphates, Hæmoglobin, Hypophosphites, Iron Iodide, Pepsin and Pancreatin, Creosote and Phosphorus, see Wellcome's Excerpta Therapeutica.

#### Feeding Tests of the Vitamin B content of 'Kepler' Malt Extract

#### Effect on growth in the Rat

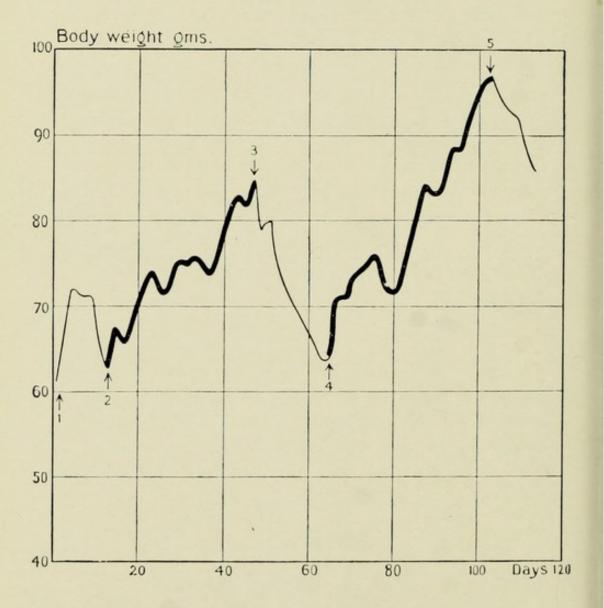


Fig. 4.—The rat was fed on a diet deficient in Vitamin B from (1) to (2). At (2) 'Kepler' Malt Extract was added to the diet. At (3) the addition of the malt extract was stopped. At (4) 'Kepler' Malt Extract was added to the diet again, and at (5) stopped again. The wasting and lack of growth on a diet deficient in Vitamin B was due to atrophy of lymphoid tissue and consequent interference with nutrition.

Thin line: growth on the diet deficient in Vitamin B.

Thick line: growth on same diet with the addition of 'Kepler' Malt Extract.

#### ERGOTOXINE

The chemistry of ergot remained obscure until 1906, when, as a result of investigations in collaboration by the scientific staffs at The Wellcome Physiological Research Laboratories and the Physiological Research Laboratories and the Ergotoxine Wellcome Chemical Works, Dartford, Kent, (Eng.) the alkaloid Ergotoxine was isolated.

Further investigations resulted in the isolation of two organic bases from ergot. One of these amines was named 'Tyramine' (p-hydroxyphenylethylamine) and was found to have a pressor effect similar to that of epinephrine. The other amine, 'Ergamine' (histamine =4-β-aminoethylglyoxaline), was 'Tyramine' found to be an intense stimulant of plain muscle, and experimentally caused the contraction of uterine muscle in high dilutions. Further investigation in these Laboratories led to the syntheses of both 'Tyramine' and 'Ergamine.'

The chemical investigation of ergot and the discovery of ergotoxine, described above, made the issue of 'Ernutin' possible and removed the outstanding difficulty of obtaining a reliable and active ergot preparation. 'Ernutin' is a clear, stable solution, presenting the active principle—Ergotoxine—in definite amount, together with suitable proportions of 'Ergamine' and 'Tyramine.'

#### Preparations

TRADE 'ERNUTIN' (ORAL) [ 1515 B. W. & Co.]

A clear palatable fluid, containing 0.033 per cent. of Ergotoxine.

Bottles of 30 c.c., 4 fl. oz. and 16 fl. oz.

In hermetically-sealed containers of 0.6 c.c. (min. 10 approx.) of *sterile* solution, containing 0.1 per cent. of Ergotoxine.

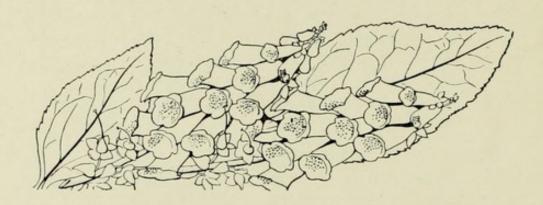
Boxes of 6 hermetically-sealed containers

PRADE 'WELLCOME' BRAND ERGOTOXINE ETHANESULPHONATE presents Ergotoxine in a purer state than has hitherto been attained.

Tubes of 0.1 gramme



#### DIGITALIS PURPUREA



Digitalis purpurea, the purple foxglove, is indigenous to Europe, particularly to England, where the soil is specially suitable for its growth and where its cultivation for medicinal purposes has received the closest attention for over a century. Digitalis leaves from other sources are stated to be far inferior to carefully-cultivated British leaves. Digitalis purpurea is specially cultivated on the Wellcome Materia Medica Farm, Dartford, Kent. Only the wild variety of seed is sown, and only the best leaves from second year's growth are selected for use. The leaves are gathered just as the plant is beginning to flower and are then dried at a low temperature.

The wide variations found by numerous observers between different theoretically-equivalent preparations of digitalis clearly establish that elaborate care in standardisation is very necessary. The high technical organisation of Burroughs Wellcome & Co., together with their early entry into the field of physiological standardisation, make possible the presentation of digitalis preparations of uniform potency.

Two standardised preparations of digitalis which present the entire activity of the total glucosides of the leaf and which retain their activity unimpaired for prolonged periods are 'DIGINUTIN'—a stable solution of the total glucosides of digitalis leaf-and 'TABLOID' DIGITALIS LEAF, a compression of standardised dried leaf.



#### Preparations

(Trade Mark)

'DIGINUTIN' (Physiologically Standardised)

[# B. W. & Co.]

1 c.c. (17 minims) corresponds to 0.1 gm. of standard digitalis=1 Cat Unit.

Bottles containing 1 fl. oz. and 8 fl. oz.

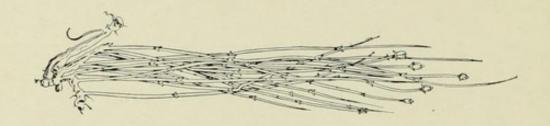
'TABLOID' BRAND DIGITALIS LEAF (Physiologically (Trade Mark) Standardised), gr. 1/2 [0.032 gm.]; gr. 1 [0.065 gm.]; and gr. 1-1/2 [0.097 gm.] [# B. W. & Co.]

Each strength in bottles of 25, 100 and 500



GATHERING DIGITALIS WELLCOME MATERIA MEDICA FARM DARTFORD, KENT (ENG.)

#### EPHEDRA-MA HUANG



EPHEDRA—known to the Chinese as Ma Huang—is the source of one of the latest additions to our materia medica
—the alkaloid Ephedrine. Investigation The natural proves that there is great variation in the ephedrine content of different species of ephedra, and that some are practically devoid of activity.

EPHEDRINE HYDROCHLORIDE is prepared at the Wellcome Chemical Works, Dartford, Kent (Eng.), elaborate precautions being taken to secure purity, particularly in regard to freedom from pseudo-ephedrine and other subsidiary alkaloids, of which I-methylephedrine and nor-d-V-ephedrine were discovered in Ma Huang by

means ensures uniformity of composition and therapeutic activity.

Preparations

Burroughs Wellcome & Co. Standardisation by chemical

'Tabloid' brand Ephedrine Hydrochloride, gr. 1/4

Trade Mark) [0.016 gm.]; and gr. 1/2 [0.032 gm.]

[# B. W. & Co.]

Each strength in bottles of 25, 100 and 500; gr. ½ also in tubes of 6

'Hypoloid' Brand Ephedrine Hydrochloride, 0.03 gm. (Trade Mark) [gr. 1/2 approx.], in 1 c.c. [ B. W. & Co.]

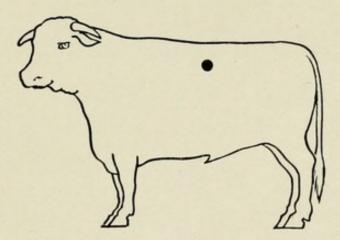
Boxes of 10 hermetically-sealed phials

'VAPOROLE' BRAND EPHEDRINE SPRAY COMPOUND
(Trade Mark) [54 B. W. & Co.]

Ephedrine, 1 per cent.

Menthol
Camphor
Oil of Thyme
'Paroleine,' to 1 fluid ounce
Bottles containing 1 fl. oz.

#### SUPRARENAL GLAND



Position of Suprarenal Gland is indicated

The medulla of the suprarenal gland contains Epinephrine.

This substance has a powerful stimulating effect on all the nerve-endings of the sympathetic system, *i.e.*, the heart is accelerated and the arterioles are constricted, thus producing a large increase in the blood-pressure. The intestinal movements are inhibited and, in most animals, the uterus is contracted. The bronchioles are dilated.

The drug is used clinically in conditions of vasomotor collapse, e.g., after surgical operations or serum shock. It is injected intramuscularly or intravenously; by the mouth, it produces little effect in the circulation.

It is also used to produce local vaso-constriction during surgical operations on the nose, etc.

In asthma, it relieves the bronchiole constriction.

#### Preparations

'WELLCOME' BRAND SOLUTION OF EPINEPHRINE,
(Trade Mark) 1 in 1000 [# B. W. & Co.]

Amber-coloured stoppered bottles of 1 oz.

'TABLOID' BRAND SUPRARENAL GLAND, gr. 5 [0.324 gm.]

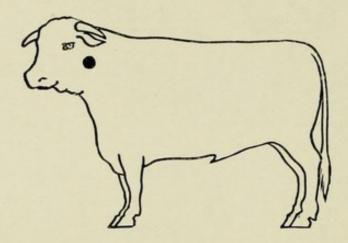
(Trade Mark)

[## B. W. & Co.]

'TABLOID' SUPRARENAL GLAND presents the complete activity of the fresh gland substance containing 0.1 per cent. Epinephrine.

Bottles of 100

TRADE 'INFUNDIN' MARK



Position of Pituitary Gland is indicated

'INFUNDIN' is the Burroughs Wellcome & Co. preparation of the posterior lobe of the pituitary gland. It is made from fresh, unfrozen ox pituitary, and claims pre-eminence because its dominating characteristic has always been a high and unfluctuating degree of activity.

Reliable pituitary extract Before issue, each batch of 'INFUNDIN' has always been submitted to physiological tests of exceptional stringency; any batch failing to pass these tests is destroyed.

Tests carried out in the United States Government Hygienic Laboratory on seven varieties of pituitary extract established the superiority of 'INFUNDIN.'\* Reports of its use in practice show that 'INFUNDIN' has been found to maintain its potency for over *ten* years, in spite of the fact that it is absolutely free from preservatives of any kind.

'INFUNDIN' may be employed generally for its action on the uterus in all post-partum conditions for which ergot is used. It is also of great value in cases of shock and collapse, because of the protracted rise in blood-pressure produced.

<sup>\*</sup> Hygienic Laboratory U.S. Public Health Service Bulletin, No. 115

In uterine hæmorrhage, due to accidental separation of the placenta during gestation, 'INFUNDIN,' in cautious doses, is sometimes of great value.

The ante-partum use of pituitary extract must, however, always be attended with great caution, owing to its powerful effect on the uterine muscle. Its use is contra-indicated in cases where there is any mechanical obstruction, and on no account must it be used before the os is dilated. Its use here is essentially an emergency measure.

After labour, when the uterus is empty, the use of a pituitary extract is not accompanied by the kind of risk which existed previously, and the dosage may be large. The indication for the post-partum use of pituitary extract is the emergency of sudden severe hæmorrhage. 'INFUNDIN' may be given subcutaneously in a dose of 10 to 15 International Units. The strong uterine action which is immediately brought about leads to a diminution of the hæmorrhage.

#### Preparations

'Hypoloid' Brand 'Infundin' TRADE Pituitary (Posterior (Trade Mark) Lobe) Extract (Original Strength, 10 International Units per c.c.) [# B. W. & Co.]

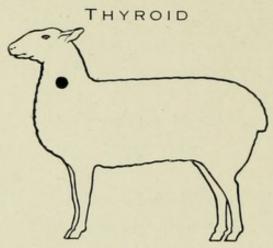
0.5 c.c. and 1 c.c. hermetically-sealed containers, in boxes of 6

'Hypoloid' Brand 'Infundin' MARK Pituitary (Posterior (Trade Mark) Lobe) Extract (5 International Units per c.c.)

[## B. W. & Co.]

0.5 c.c. and 1 c.c. hermetically-sealed containers, in boxes of 6

NOTE.—'INFUNDIN' (Original Strength) is always supplied unless the lower potency is specified.



Position of Thyroid is indicated

'TABLOID' THYROID represents the whole substance of carefully-selected, healthy, unfrozen sheep's thyroids and can be relied on in all circumstances to produce the complete therapeutic effect of the fresh gland. In the present state of knowledge no extract can be relied on to do this.

STANDARDISATION.— 'TABLOID' THYROID is standardised by chemical means so as to ensure that the fresh healthy gland, of which each product represents a definite amount, contains 0.08 per cent. of iodine in organic combination.

This standard is equivalent to 0.32 per cent. of iodine in the desiccated gland substance.

The dosage of 'Tabloid' products is stated in terms of fresh gland and not dried gland (4:1). Thus, 'Tabloid' Thyroid, gr. 1, is the equivalent of dried gland, gr. 1/4

'TABLOID' THYROXINE, prepared at the Wellcome Chemical Works, Dartford, Kent, (Eng.) is also exhibited.

#### Preparations

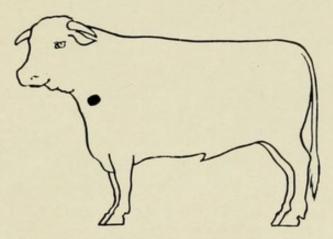
'Tabloid' brand Thyroid (Standardised), gr. 1/10 (Trade Mark) [0.0065 gm.]; gr. 1/4 [0.016 gm.]; gr. 1/2 [0.032 gm.]; gr. 1 [0.065 gm.]; gr. 1-1/2 [0.097 gm.]; gr. 2 [0.13 gm.]; gr. 2-1/2 [0.162 gm.]; and gr. 5 [0.324 gm.] [34 B. W. & Co.]

Each strength in bottles of 100 and 500

'TABLOID' BRAND THYROXINE, 0.0001 gramme [gr. 1/640 (Trade Mark) approx.]; and 0.001 gramme [gr. 1/64 approx.]

Each strength in bottles of 100

#### PARATHYROID GLAND



Position of Parathyroid Gland is indicated

EVIDENCE of the effect of parathyroid on the calcium metabolism of the body has led to its increased use in preference to calcium salts when the blood calcium is below normal. Its clinical value, in varicose ulceration and in sprue, would appear to be established.

Doubt has been cast on the identity of some of the parathyroid offered for medicinal use. All gland substance intended for use in 'TABLOID' Authenticity

PARATHYROID GLAND is carefully dissected by trained workers, and undergoes a searching inspection checked by microscopic sections to ensure the genuineness of the product. With such safeguards, the medical profession will appreciate that the means are at hand to ensure the administration of authentic parathyroid.

#### Preparations

'TABLOID' BRAND PARATHYROID GLAND, gr. 2/5 [0.026 gm.] (Trade Mark) [24 B. W. & Co.]

(Equivalent to gr. 1/10 [0.0065 gm.] of desiccated gland)

Bottles of 25 and 100

'TABLOID' BRAND-PARATHYROID GLAND AND CALCIUM (Trade Mark) LACTATE [# B. W. & Co.]

R Glandulæ Parathyroideæ, gr. 1/10 [0·0065 gm.] Calcii Lactatis, gr. 5 [0·324 gm.]

Bottles of 25 and 100

# ANTI-GAS-GANGRENE-GLOBULINS

It was observed that the toxæmia seen in cases of acute intestinal obstruction and in peritonitis with paralytic ileus bears a striking resemblance to that found in severe cases of gas-gangrene. This led to the suggestion that anærobic organisms might also be responsible for the toxæmia of acute intestinal obstruction.\* Of these organisms, *Bacillus welchii* is almost ubiquitous—in dust, soil and milk—and its presence in the obstructed intestine is easily accounted for.

Clinical trial, over a period of two-and-a-half years, of a serum prepared against *B. welchii* gave encouraging results. The serum used in these investigations was prepared at The Wellcome Physiological Research Laboratories, Beckenham, Kent (Eng.).

The cases were those admitted to an important general hospital. In a series of cases of severe peritonitis, it was observed that a reduction in mortality occurred, compared with a control series, from 6.3 per cent. to 1.17 per cent. In acute obstruction, there was a reduction of mortality from 24.8 per cent. to 9.3 per cent.

In cases of acute obstruction, similar effects were observed, but improvement usually followed so rapidly on successful operative relief that it is only by regarding the series as a whole that the effect of the antitoxin can be assessed.

### Preparation

'Wellcome' Brand Concentrated Anti-Gas-Gangrene (Trade Mark) Globulins (W)—(B. welchii=B. perfringens)

Hermetically-sealed phials containing 4000 "W" Units (400 units or more per c.c.)

<sup>\*</sup> British Journal of Surgery, 1926, XIV, p. 295

### ALKALINE MEDICATION

The necessity for the administration of alkaline draughts arises frequently in modern practice: sometimes as an ordinary antacid or as a cooling, refreshing drink; at other times, for the relief of conditions of hypo-alkalinity and the disturbed acid-base equilibrium occurring in acidosis.

It is difficult to persuade patients to persist in the treatment when sodium bicarbonate and similar alkalis are prescribed in the ordinary way. It is also noted that the psychological effects of such simple prescriptions are not good, and no single alkaline base can secure re-mineralisation of the system, which is often necessary.

'Tabloid' Alkaline Compound, Effervescent, solves these difficulties. One in a glass of water produces a very acceptable effervescent draught; the equivalent of 25 doses is contained in a tube; each product presents the alkali bases, sodium, potassium, magnesium and calcium, in precise amounts. One product will neutralise 50 c.c. of a N/10 acid solution.

SUGGESTED USES.—As an antacid draught: to correct hypo-alkalinity associated with gastric disturbance, the vomiting of pregnancy, malnutrition, nephritis, diabetes, fevers, ædema: to restore the alkaline balance in acidosis and to assist re-mineralisation.

### Preparation

'TABLOID' BRAND ALKALINE COMPOUND, EFFERVESCENT (Trade Mark) [# B. W. & Co.]

Ry Sodii Bicarbonatis, Galcii Lactophosphatis, Potassii Bicarbonatis, Magnesii Sulphatis Anhyd., Sodii Chloridi, Salis Effervescentis, gr. 1 [0.065 gm.] gr. 1 [0.065 gm.]

One product, in solution, produces 29.4 grains of sodium citrate



# INJECTION TREATMENT OF VARICOSE VEINS

INJECTION of suitable sclerosing solutions is highly successful and falls within the province of the general practitioner. The technique is simple, the inconvenience to the patient nominal, and the results attained in the great majority of cases are highly satisfactory both to the practitioner and his clients.

Preparations

'Hypoloid' Brand Quinine and Urethane

(Trade Mark) [ & B. W. & Co.]

Quinine Bihydrochloride, 0.26 gm., and Urethane, 0.13 gm., in 2 c.c. Boxes of 5 hermetically-sealed containers; also rubber-capped bottles containing 25 c.c.

Hypoloid' brand Sodium Salicylate [ 89 B. W. & Co.] (Trade Mark)

20 per cent., 30 per cent. or 40 per cent. solution in hermetically-sealed containers of 5 c.c. Boxes of 5

### IODINE THERAPY

'IODICIN'—a calcium salt of iodo-ricinoleic acid—presents a high percentage of iodine in organic combination. Tasteless and odourless; produces no gastric disturbance; absorbed from bowel without causing irritation. May replace potassium iodide on all occasions. The *Chocolate Base* product is specially suited for prophylaxis and treatment of juvenile goitre.

Preparations

'TABLOID' 'IODICIN' (Calcium Iodo-ricinoleate), (Trade Marks) gr. 3 [0.194 gm.] (CAPSULE)

[# B. W. & Co.]

Each product secures the administration of one grain of iodine in organic combination.

Boxes of 50

'TABLOID' 'IODICIN' (Calcium Iodo-ricinoleate), 0.03 gramme (Trade Marks) [gr. 1/2 approx.] [ B. W. & Co.] (Chocolate Base)

Each product secures the administration of 0.01 gramme (gr. 1/6 approx.) of iodine in organic combination.

Bottles of 25 and 100

# TWO HISTORICAL TRADE 'TABLOID' BRAND MEDICAL EQUIPMENTS

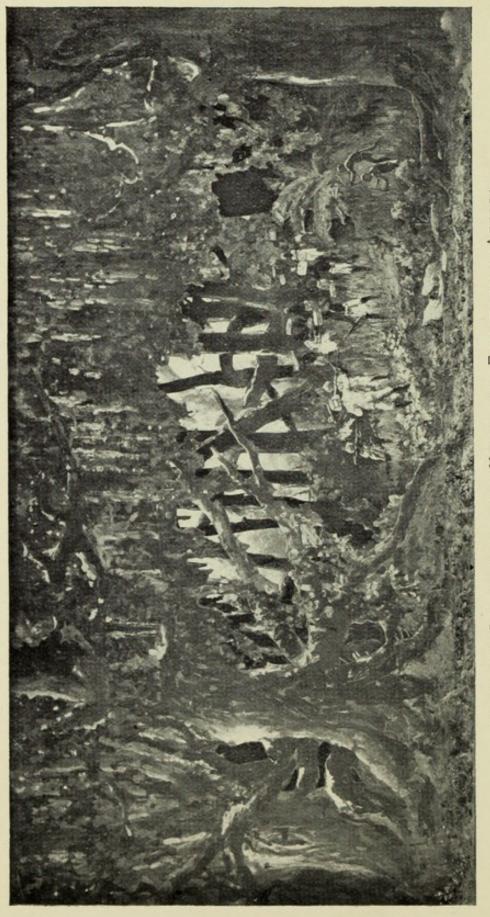


The 'TABLOID' MEDICINE CHEST which served the Mount Everest Expeditions of 1921, 1922 and 1924



One of the 'TABLOID' MEDICINE CASES carried round the world on the U.S.A.

Army Air Service World Flight



DIORAMA-STANLEY IN THE HEART OF EQUATORIAL AFRICA

During his journeyings in the fever-stricken swamps of the Aruwhimi and the forest jungles of the Dark Continent, STANLEY learnt the value of the 'TABLOID' MEDICAL EQUIPMENTS, upon which he relied DIORAMAS DEPICTING TYPICAL PIONEER
FEATS OF EXPLORATION WITH WHICH
'TABLOID' MEDICAL EQUIPMENTS HAVE
BEEN ASSOCIATED

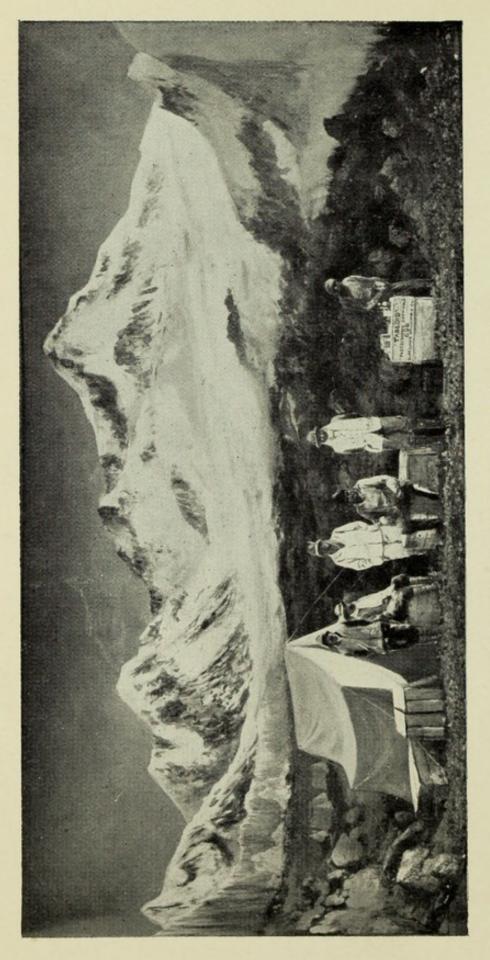


EIGHT typical dioramas are exhibited.

These show Stanley in the heart of the dense forests of Central Africa; Peary and his companions at the North Pole; Captain Scott's Expedition to the Antarctic, during which he succeeded in reaching the South Pole; Amundsen at the South Pole; Members of the Mount Everest Expedition at their Main Camp on the Rongbuk Glacier, with Mount Everest in the distance; Alcock on his pioneer Atlantic flight; Ross Smith on his flight to Australia; and the U.S.A. Army Air Service flyers reaching Croydon on their World Flight.

Other dioramas illustrate incidents in which 'Tabloid' First-Aid equipments prove their value.

The problem of providing a ready supply of medicaments for administration in emergencies or places remote from institutional aid was solved many years ago by Burroughs Wellcome & Co. In the course of time, various types of medical and first-aid outfits have been evolved to meet new conditions as they arose, so that now an equipment is available, suitable for every occasion.



# DIORAMA-MOUNT EVEREST EXPEDITION

The Base Camp on the Rongbuk Glacier, with the summit of Mount Everest in the distance. One 'Tabloid' Medicine Cherr supplied all the medical requirements of all three Expeditions—1921, 1922 and 1924. On the right, Capt. Noel, who developed his official photographic records and cinematograph film on the spot with 'Tabloid' Photographic Chemicals



# ILLUSTRATIONS OF MEDICINE CHESTS AND CASES

Typical examples of 'Tabloid' and 'Soloid' Brand Cases of hypodermic, ophthalmic and general medicaments are illustrated on this and the following pages, whilst a full description of their contents and prices will be found in the Price List Section of Wellcome's Excerpta Therapeutica. Application for fuller particulars, and illustrations in actual colours, is cordially invited.

The assistance which Burroughs Wellcome & Co. are able to give in the choice of suitable equipments is always freely at the disposal of those who are called upon to select outfits for soldiers, travellers, missionaries and others proceeding to remote parts of the world.

# No. 93 'Tabloid' Brand Aseptic Ophthalmic Pocket=Case



Exceptionally complete and compact. Fits easily into the vest pocket. If the contents be removed, the Case may readily be sterilised.

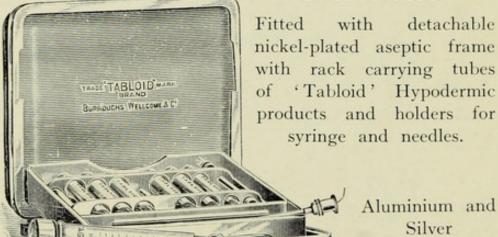
Nickel-plated Metal

# TRADE 'TABLOID' BRAND

### HYPODERMIC POCKET-CASES

Provide, in the smallest possible space, complete equipments for hypodermic work. The metal cases may readily be sterilised on removal of their contents.

# No. 7 'Tabloid' Brand Aseptic Hypodermic Pocket-Case

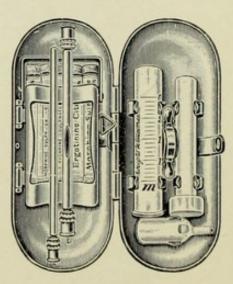


No. 7 'Tabloid' Brand Aseptic Hypodermic Pocket-Case Measurements:  $3\frac{1}{2} \times 3\frac{1}{8} \times \frac{7}{8}$  in.

# No. 40 'Tabloid' Brand Aseptic Hypodermic Pocket=Case ("The Mussel Shell")

Component parts held in metal clips and rack, ensuring maximum security.

Nickel-plated Metal, complete with soft leather cover.



No. 40 'Tabloid' Brand Aseptic Hypodermic Pocket-Case Measurements:  $3\frac{1}{2} \times 1\frac{3}{3} \times 1$  in

# TRADE 'TABLOID' ENAND MEDICINE CHESTS AND CASES

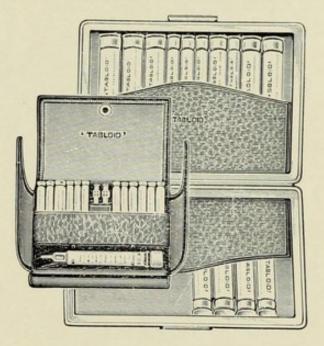


'TABLOID' Brand Medicine Chests and Cases have earned a reputation for convenience, portability and efficiency which places them in a class by themselves.

### No. 126 'Tabloid' Brand Medicine Pocket-Case

A convenient handsome Case for the
breast-pocket. The
hypodermic equipment may be withdrawn from the larger
case, if desired, for
separate use.

Cowhide, Morocco, Pigskin, Brown and Green Seal or Crocodile Leathers.



No. 126 'Tabloid' Medicine Pocket Case Measurements: 5½ × 4 × 1½ in

# No. 134 'Tabloid' Brand Medicine Pocket = Case Fitted with eight phials of 'Tabloid' Brand products, etc.

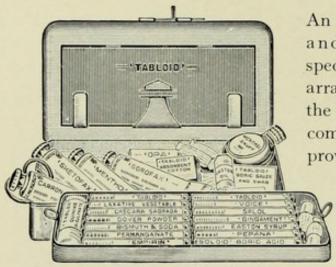


Solid Cowhide, unlined, Cowhide, Morocco, Pigskin, Brown Seal or Crocodile Leathers.

No. 134 'Tabloid' Brand Medicine Pocket-Case Measurements:  $6\frac{1}{2} \times 4\frac{1}{2} \times 13\%$  in



# No. 261 'Tabloid' Brand Medicine Case ("The Orient")



No. 261 'Tabloid' Brand Medicine Case Measurements: 75% × 4¼ × 2¼ in.

An elegant, compact and well-fitted Case specially devised and arranged for service in the East. A reliable companion that will provide efficient aid on the spot.

Aluminised Metal

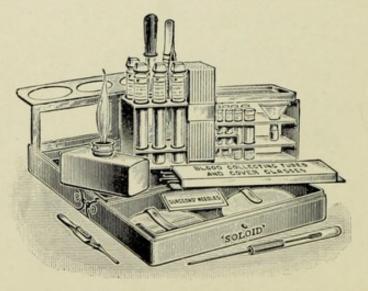
# TRADE 'SOLOID' BEAND ANALYSIS AND TEST CASES

Portable outfits containing apparatus and reagents for the analyses of urine, water, sewage, etc., and equipments providing, in small compass, the essentials for the bacteriological examination of blood, pus, sputum, etc.

# No. 505 'Soloid' Brand Bacteriological Case

Owing to its small size and light weight, this Case can readily be carried into the sick chamber to obtain a blood specimen or a throat swab.

Nickel-plated Metal, with soft leather cover.

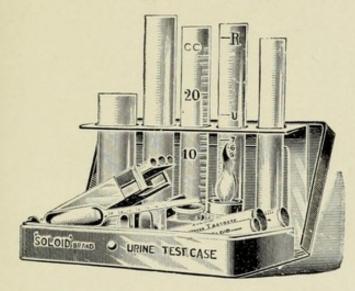


No 505 'Soloid' Brand Bacteriological Case Measurements: 5 × 3 ¼ × 15% in,

# No. 510 'Soloid' Brand Urine Test Case



Compact and easily rendered aseptic.



Contains the means of applying to urine qualitative and quantitative tests for albumin, sugar, etc.

Nickel-plated Metal, with soft leather cover.

No. 510 'Soloid' Brand Urine Test Case Measurements:  $5\frac{3}{4} \times 2\frac{3}{4} \times 1\frac{1}{4}$  in.

## TRADE 'TABLOID' BRAND FIRST-AID

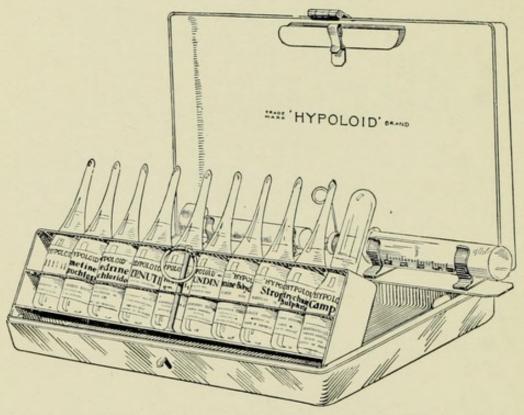
Compact, comprehensive outfits of dressings, first-aid accessories, etc.

# No. 702 'Tabloid' Brand First-Aid



# The Ideal Emergency Case

# HYPODERMIC POCKET-CASE No. 62



Nickel-plated Metal. Measurements: 5 x 3 3/8 x 3/4 in. Weight, about 10 oz

- (1) Syringe section easily removable for sterilisation.
- (2) Breakages prevented by spring which reduces vibration to a minimum
- (3) Containers cannot fall out when Case is opened.
- (4) Labels legible without removing containers.

Contains an 'AGLA' Aseptic Hypodermic Syringe (min. 20 or 1 c.c.), two Rustless needles, 10 'Hypoloid' products, two files and a list of 'Hypoloid' preparations.

Any selection of 'Hypoloid' products can be included according to the physician's individual requirements

The above Case is also supplied fitted with an 'AGLA' Syringe in Spirit-tight Container

At every great

INTERNATIONAL EXHIBITION

at which the

# BURROUGHS WELLCOME & Co.

products have been exhibited they have received the greatest number of

# COMPETITIVE HIGHEST AWARDS

for

SCIENTIFIC EXCELLENCE.

The total number of Competitive Highest Awards received now exceeds

270

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TWO GRAND PRIZES

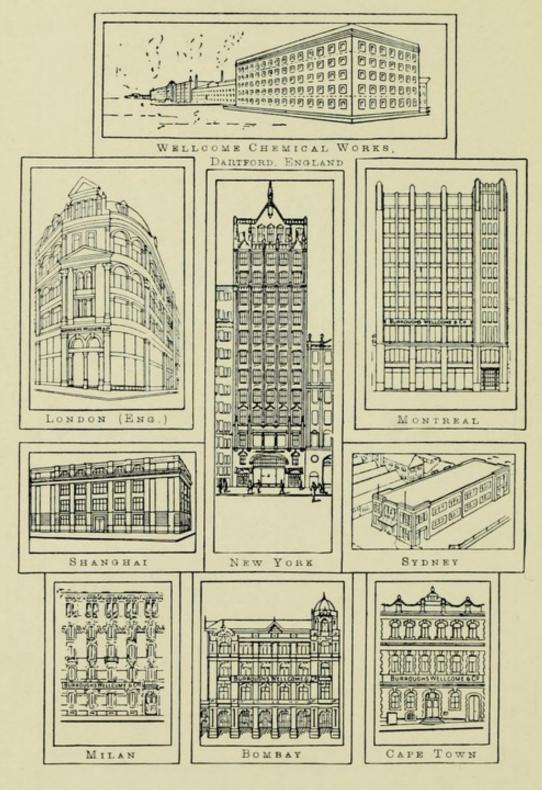
at the

INTERNATIONAL CONGRESS

OF MEDICINE

London, 1913

# B. W. & Co. Offices, Warehouses and Works



Montreal—643, Craig Street West London (Eng.)—Snow Hill Buildings New York—9 & 11, East Forty-first Street

SYDNEY-Victoria Street, Waterloo. CAPE Town-5, Loop Street MILAN-26, Via Legnano

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TRADE MARK

# 'TABLOID'

The word 'TABLOID' is a registered Trade Mark.

The word 'TABLOID' denotes a Burroughs Wellcome & Co. product, and is applied to many classes of products.

The word 'TABLOID' on a package, wherever purchased, ensures supreme and uniform quality.

The word 'TABLOID' on your prescription secures for your patient a product of the same composition and activity always and everywhere.

The word 'TABLOID' may not be used except with reference to a Burroughs Wellcome & Co. product.

# BEWARE OF IMITATIONS

Offenders are prosecuted rigorously in the interests of prescribers, dispensers, patients and the owners of the Trade Mark



GENERAL TRADE MARK