

# The Journal of Laryngology and Otology

EDITED BY  
WALTER HOWARTH

WITH THE ASSISTANCE OF  
W. M. MOLLISON

## Contents

OTOSCLEROSIS IN CHILDHOOD . . . . .	WILLIAM MCKENZIE
OBSERVATIONS UPON THE LOUDNESS RECRUITMENT PHENOMENON, WITH ESPECIAL REFERENCE TO THE DIFFERENTIAL DIAGNOSIS OF DIS- ORDERS OF THE INTERNAL EAR AND VIII <sup>TH</sup> NERVE . . . . .	M. R. DIX, C. S. HALL- PIKE AND J. D. HOOD
ON THE PHYLOGENY OF THE MAMMALIAN AUDITORY OSSICLES . . . . .	A. TUMARKIN
ON THE EVOLUTION OF THE AUDITORY PERILYMPHATIC SYSTEM . . . . .	A. TUMARKIN
CLINICAL RECORD	
OSTEOMATA OF THE EXTERNAL AUDITORY MEATUS—A CASE REPORT . . . . .	A. BELAL
SOCIETIES' PROCEEDINGS	
THE SCOTTISH OTOLOGICAL AND LARYNGOLOGICAL SOCIETY.	

London

Headley Brothers

109 Kingsway, W.C.2

Monthly, 4/- net post free

Annual Subscriptions 40/- net

# The Journal of Laryngology and Otology

(Founded in 1887 by MORELL MACKENZIE and NORRIS WOLFENDEN)

EDITED BY  
WALTER HOWARTH

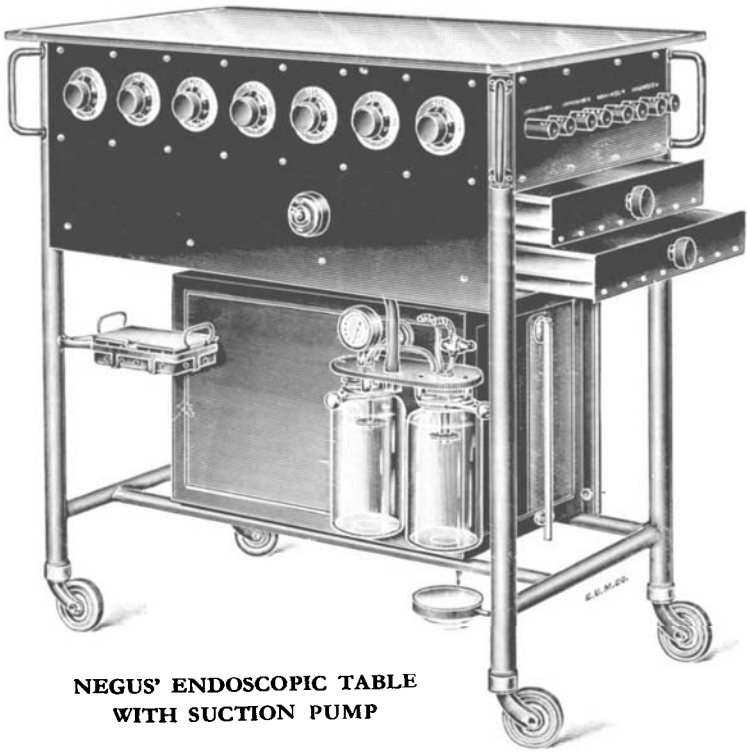
ASSISTED BY  
W. M. MOLLISON

1. Original Articles are accepted on the condition that they have not been published elsewhere.
2. Manuscripts should be typewritten, on one side only of the paper, and well spaced.
3. Galley proofs and engraver's proofs of illustrations are sent to the author. Corrections, which should be kept to a minimum, must be clearly marked and no additional matter added.
4. Orders for reprints should be sent when returning galley proofs, and for this purpose special forms are supplied, on which the price of the reprints is stated.
5. Authors of Original Communications on Oto-Laryngology in other Journals are invited to send a copy, or two reprints, to the *Journal of Laryngology*. If they are willing, at the same time, to submit their own abstract (in English, French, Italian, or German) it will be welcomed.
6. Editorial Communications may be addressed to THE EDITOR, *Journal of Laryngology*, c/o HEADLEY BROTHERS, 109 Kingsway, London, W.C.2.
7. The Annual Subscription commencing with the January issue is Two Pounds sterling, post free, and is payable in advance.
8. Single copies, both of the present and the previous series, are on sale at Four Shillings each.
9. All Subscriptions, advertising and business communications should be sent to the Publishers, HEADLEY BROTHERS, 109 Kingsway, London, W.C.2.

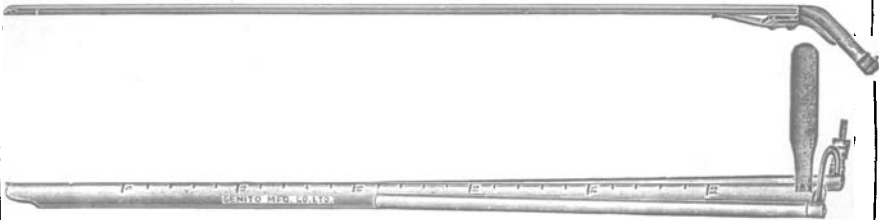
*United States of America*

Orders for this Journal may be sent either through a local bookseller, or to Messrs. G. E. STECHERT & Co., 31-33 East 10th Street, New York, or may be sent direct to the Publishers, HEADLEY BROTHERS, 109 Kingsway, London, W.C.2, England.

Please mention *The Journal of Laryngology* when replying to advertisements



**NEGUS' ENDOSCOPIC TABLE  
WITH SUCTION PUMP**



**Cesophagoscope with detachable Suction Tube and Proximal  
Lighting as designed for V. E. NEGUS, M.S., F.R.C.S.  
Obtainable in 4 sizes**

MADE BY

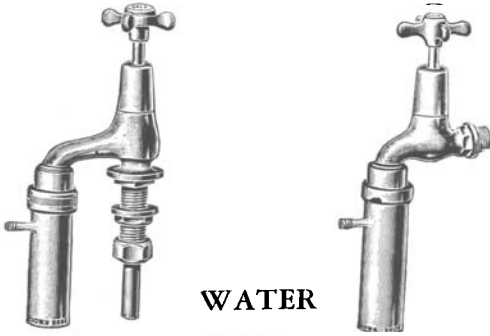
**THE G<sub>ENITO-</sub>U<sub>RINARY</sub> MFG. Co. LTD.**

**28a DEVONSHIRE STREET, LONDON, W.1**

Telephone:  
WELBECK 2835 (3 lines)

Telegrams:  
CYSTOSCOPE, WESDO, LONDON

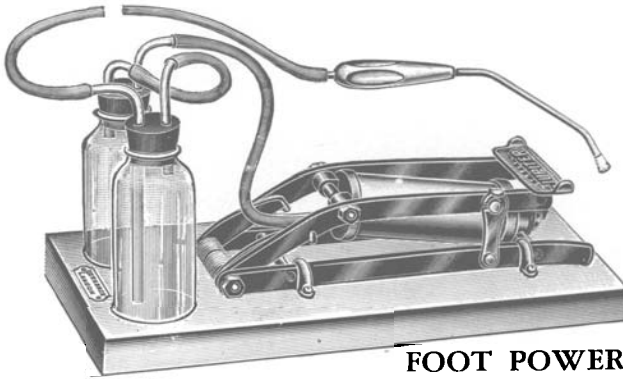
Please mention *The Journal of Laryngology* when replying to advertisements



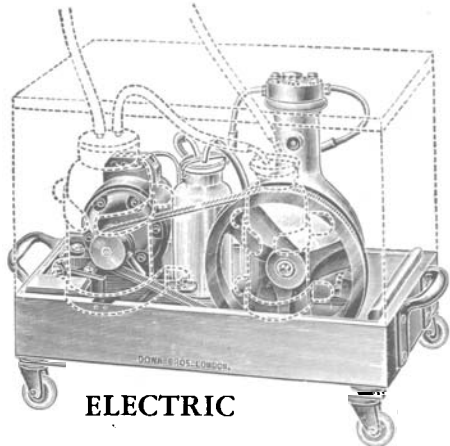
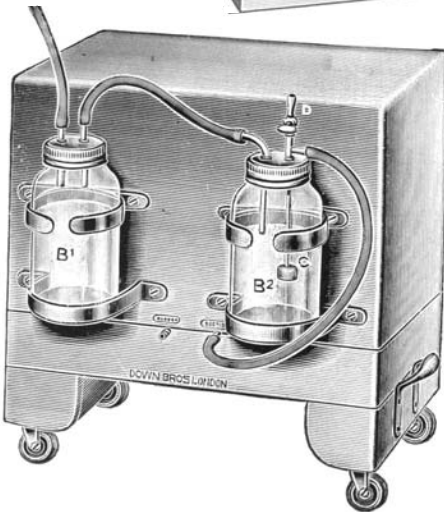
WATER

# SUCTION APPARATUS

Particulars on application



FOOT POWER



ELECTRIC

## DOWN BROS. & MAYER & PHELPS Ltd.

Correspondence: 23 PARK HILL RISE, CROYDON

Telephone: Croydon 6133, 6134, 6135

Showrooms: 32/34 NEW CAVENDISH STREET, LONDON, W.1

Telephone: WELBECK 3764

DOWN BROS. AND MAYER & PHELPS HAVE AMALGAMATED.  
THE PERSONAL MANagements REMAIN AS HERETOFORE.

Please mention *The Journal of Laryngology* when replying to advertisements

**PRESCRIBE THE EASY EFFECTIVE METHOD**

When spraying, the patient can hold his head in a natural position, yet the solution spreads throughout the nasal cavity, assuring thorough treatment. Effective dropper-application, on the other hand, requires a complicated posture technique which patients are apt to neglect in home treatment.



**DeVilbiss  
ATOMIZERS**



**DROPPER ?**



**ATOMIZER ?**

These illustrations, which are based on X-ray research, clearly demonstrate the advantages of the atomizer as compared with the dropper  
 The **AEROGRAPH Co., Ltd., Lower Sydenham, London, S.E.26**  
 Sole Distributors of DeVilbiss Products in the United Kingdom.  
 Telephones: Sydenham 6060—8 Lines.

CVS—225

*NOW READY*

**THE ACOUSTIC METHOD**

*For the Training of the Deaf and Hard-of-Hearing Child*

By **MAX A. GOLDSTEIN, M.D., LL.D.**

This Volume contains 244 pages; 50 illustrations

Textile Leather (Waterproof) Binding

**\$3.00 Postage Prepaid**

Twelve chapters, including Evolution of the Acoustic Method — Definition and Principles of the Acoustic Method — The Practice of the Acoustic Method — The Pupil: (1) The Deaf Child; (2) The Hard-of-Hearing Child; (3) The Pre-School Deaf Child — The Teacher — Case Recording — Tests of Hearing — Audiometers — The Audiogram — Hearing Aids — Tactile Training — Anatomy of the Ear.

Published by **THE LARYNGOSCOPE PRESS**

640 South Kingshighway

St. Louis, Mo.

Please mention *The Journal of Laryngology* when replying to advertisements



## THE S.D. PORTABLE AUDIOMETER

A.C./D.C.

**T**HIS genuinely portable Audiometer, built into a strong carrying case, offers great accuracy combined with convenience in use.

It incorporates an extremely stable beat frequency oscillator giving a continuous range of frequency, and a built-in valve voltmeter not only allows accurate zero setting of frequency but ensures a constant result whatever the conditions of voltage or of valve life.

A crystal microphone and amplifier give excellent speech reproduction and in addition enable speech level tests to be made. A masking note of mixed low frequency and a manual mute are also provided.

Our Peepshow for testing the hearing of young children can be used with this Audiometer.

**ALFRED PETERS & SONS LTD.**  
FARGATE HOUSE · SHEFFIELD 1

Please mention *The Journal of Laryngology* when replying to advertisements



## THE SD/2 AUDIOMETER

**T**HIS instrument offers not only great accuracy but incorporates some unique features, which allow a most comprehensive range of tests to be made and ensures a constant result under all conditions of voltage and valve life.

It includes among many facilities an automatic interruptor circuit, as well as a continuous tone: twin matched earphones allowing the test and masking tones to be switched to either ear, while a balance control enables the response of each ear to be matched simultaneously.

A built-in crystal microphone and amplifier give excellent speech reproduction and allow speech level tests to be made, while the built-in meter and cathode ray tube ensure continuing accuracy of frequency and output.

Our Peepshow for testing young deaf children may be used with this Audiometer.

**ALFRED PETERS & SONS LTD.**  
FARGATE HOUSE · SHEFFIELD 1

Please mention *The Journal of Laryngology* when replying to advertisements

# CHRONALGICIN

(*Benger*)

**EAR DROPS**

for

## CHRONIC SUPPURATIVE OTITIS MEDIA



**Relieves Congestion**

**Removes Debris**

**Controls Infection**

**Promotes Drainage**

**Destroys Odour**

**Eliminates Discharge**

Combines Urea, Ephedrine, Silver Proteinate, Phenyl Mercuric Nitrate for effective action.

*In acute otitis media  
"AURALGICIN" (Benger)  
is indicated.*

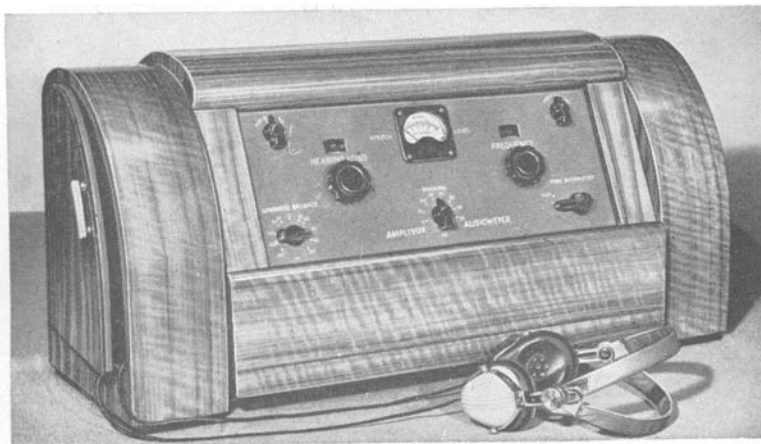
*Further information can be obtained from our Medical Department:*

**BENGER'S LIMITED, HOLMES CHAPEL, CHESHIRE**

Please mention *The Journal of Laryngology* when replying to advertisements



# THE AMPLIVOX AUDIOMETER



## *The Basic Instrument of Modern Otology*

### NEW TESTS NOW POSSIBLE

Speech-loss measurement in decibels now obtainable through dynamic microphone and speech input meter.

Loudness balance control gives measurement of the recruitment factor.

Input for group-test equipment and gramophone.

### CONSISTENT ACCURACY OF RESULTS

Eleven exact test frequencies 125-12,000 c.p.s.

Voltage compensation ensures that signal intensity does not vary should mains voltage do so.

### CALIBRATED MASKING TONE

Masking intensity varies equally with normal hearing acuity over range 125-4,000 c.p.s., permitting accurate masking control. Calibrated in decibels.

### SIMPLICITY OF OPERATION

Twin matched headphones (on double headband) for all air conduction tests; bone conductor on single headband, or interchangeable with one 'phone.

Hearing Loss dial calibrated in 5 dB steps from minus 10 dB to plus 100 dB.

Same figures on dial are read for air and bone conduction, and for all frequencies.

*Full details are available from the manufacturer,  
who will gladly arrange demonstrations, if required.*

**AMPLIVOX LTD., 2 BENTINCK ST., LONDON, W.1. (Welbeck 2591)**

Please mention *The Journal of Laryngology* when replying to advertisements

## CONTENTS

	PAGE
OTOSCLEROSIS IN CHILDHOOD. William McKenzie (London) . . . . .	661
OBSERVATIONS UPON THE LOUDNESS RECRUITMENT PHENOMENON, WITH ESPECIAL REFERENCE TO THE DIFFERENTIAL DIAGNOSIS OF DISORDERS OF THE INTERNAL EAR AND VIII <sup>TH</sup> NERVE. M. R. Dix, C. S. Hallpike and J. D. Hood (London) . . . . .	671
ON THE PHYLOGENY OF THE MAMMALIAN AUDITORY OSSICLES. A. Tumarkin (Liverpool) . . . . .	687
ON THE EVOLUTION OF THE AUDITORY PERILYMPHATIC SYSTEM. A. Tumarkin (Liverpool) . . . . .	691
CLINICAL RECORD—	
Osteomata of the External Auditory Meatus. A Case Report. A. Belal (Cairo) . . . . .	702
SOCIETIES' PROCEEDINGS—	
The Scottish Otological and Laryngological Society . . . . .	704

## FOR ORAL MEDICATION

KERFOOTS  
Proflavine  
LOZENGES


enable the affected tissues  
to be bathed in a naturally  
buffered antiseptic solution.

Each contains  
Proflavine Sulphate 3 mg.  
In bottles of 36 and 500

KERFOOTS  
Sulphanilamide  
LOZENGES

are of special value in  
throat affections due to local  
streptococcal infection.

Each contains  
Sulphanilamide gr. 1  
In bottles of 50 and 500



Professional samples on request.

Thomas Kerfoot & Co. Ltd., Vale of Bardsley, Lancashire

K17

Please mention *The Journal of Laryngology* when replying to advertisements