

BUZZA AND LEVENSON PRODUCTS

By Ron McMullen former Telegraphist, Telegraph Supervisor, Senior Postal Clerk, Instructor and Postmaster in the Australian P.M.G. Department

Buzza is a name associated with several Morse keys as well as other minor electrical equipment such as buzzers.

The founders of the company were August A Klaus, an engineer who was born in Germany in 1904 and came to Sydney in 1927 charged with installing modern textile machinery in local factories, and his brother Victor who followed him two years later after service in the German army. In 1939 Gus and Victor Kraus commenced manufacturing BUZ (Morse code) sets under contract to the distributing firm of Gulterman & King. The new venture operated as Buzza Products and its products were made in the upper floors of the Gulterman & King business in Clarence Street, Sydney.

On the outbreak of war with Germany in 1939, Gus was interned as an enemy alien in Long Bay Gaol Sydney, but as soon as authorities became aware of his engineering skills he was quickly released in order to increase the production of BUZ sets for the Australian and United States navies and armies. Hence the name 'Buzza' It is not known if Victor was also imprisoned. It would have been during the war years that the better types of keys, straight keys and semi automatic keys were made.

It appears copies of American keys were made rather than the design of new keys. The J36 and Navy 26001-B keys were the basics.

As Morse code operations were starting to slow down, items other than Morse keys became the main operations. 'Buz Builder' building type toys somewhat similar to Meccano and "Buz' gear sets which were popular at that time were added. He continued to make practice type Morse keys along with the cheaper buzzer sets. These were also distributed by Gulterman and King. In 1955/56, Mr. Klaus built his own premises at 80 Hotham Parade, which was in the industrial area of Artarmon NSW.

The company ceased trading in 1977 and the building was sold. Gus died in 1975



Gus (left) and Victor in their workshop at Artarmon.



Brass sign from Artarmon premises.



Gus in later years.



Buzza set No. 1



Buzza set No. 2.



Buzza set No 3



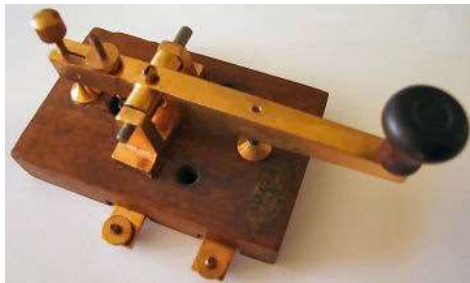
Doodle Bug by Buzza.



Learner set.



Learner sets.



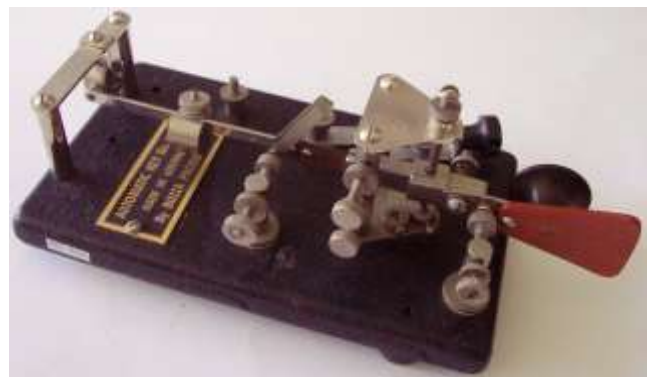
Brass straight key – Australian pattern.



U.S. style key (The box label read 'HAND TELEGRAPH KEY U.S. NAVY TYPE 26001-B Made by BUZZA PRODUCTS, SYDNEY')



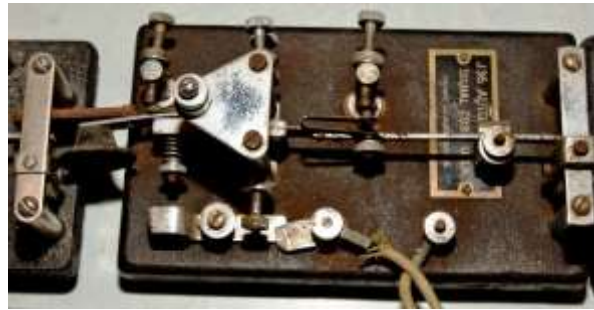
Buzza double lever semi automatic key.



Buzza 'Lightning' type.



Buzza 100 single lever.



Buzza J36 on a standard Buzza base supplied to U.S. forces during W.W. 2.
The label reads 'J36 Automatic Key,
Signal Corp. U.S.A.
Made in Australia'.

LEVENSON'S RADIO



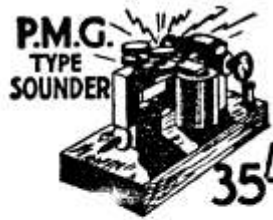
Typical Levenson hand key

Levenson's Radio Shop, Sydney was a popular source of mainly practice type morse instruments. It is not known if they made the items themselves or sold items made by others with the Levenson name attached. Certainly their 'Like a Flash' semi automatic key is the same as the Buzza 100 and it is fairly certain there was an association between the two.

Following is a reproduction of their 1941 catalogue. It has been reproduced from a poor photocopy and formatting (very cramped) has not been strictly retained. Otherwise it is authentic.

For further information on Levenson's keys see the file 'Australian Telegraph Keys and Instruments'.

HOW TO LEARN
The
MORSE CODE
and
**SEMAPHORE
SIGNALLING**



Simple instructions which, if followed, will ensure Proficiency
in Morse Telegraphy in a minimum of Time.—L. M. SECCOMBE



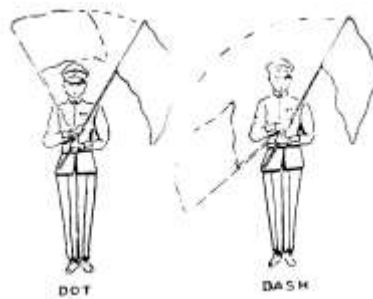
PUBLISHED BY
LEVENSON'S RADIO
226 Pitt Street, Sydney
Phones: M 2025-6-7

MORSE FLAG SIGNALLING

Having once learnt to send on the Morse Key and receive on Sounder or Buzzer it will be found quite easy to read the Morse Signal Flag, the Morse Lamp or the Heliograph.

Morse Code Signals may be transmitted by means of a flag (see illustrations). The flag is held with the right hand uppermost, both hands close together, and the flag pointing across the left shoulder. A dot is made by sweeping the flag over to a position across the right shoulder and back again to the right hand side.

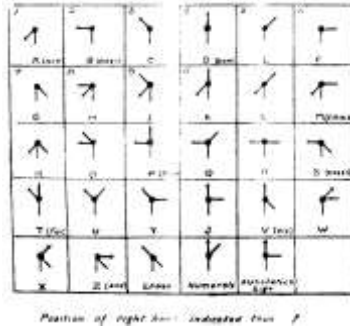
A dash is made by sweeping the flag well down and back again. The action required will be better understood by referring to the illustration.



SEMAPHORE SIGNALLING

Semaphore Signals may be transmitted either by using the arms only or with the aid of small flags held in the hands. When not actually sending a message the hands should be kept together in front of the body; arms pointing downwards, if using flags these should be pointed down between the feet.

This position is also adopted to mark the space between words.

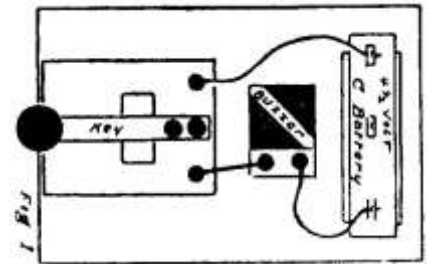


The Semaphore Signal Chart illustrates the positions of arms or flags as seen by the reader; the sender faces the reader. The position of the right arm or flag is indicated by a short cross line.

Numbers are represented by sending the letters A to K, preceded by the numerals sign.

Buzzer Sets (Fig 1.)

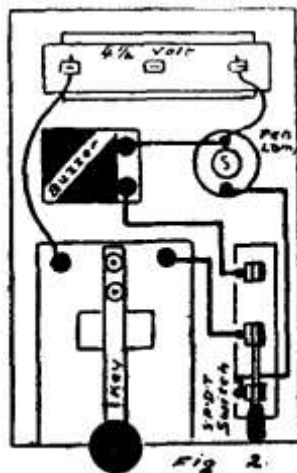
1 9 x 6 Baseboard	1.0
1 Morse Key , nickel plated	12.6
1 Buzzer, High Pitched Tone.....	4.6
1 Battery Holder	9
Screws, lugs and hook-up wire	6
1 4½ Volt 'C' Battery	9
READY BUILT 22/6	£1. 1.0



(Short or long keys are available) P.M.G. Type Keys Extra 7/-

Buzzer and Lamp Set (Fig. 2.)

1 9 x 6 Baseboard	.... 1.0
1 Morse Key, nickel plated	.... 12.6
1 Buzzer, High Pitched	.... 4.6
1 Pea-Lamp Holder	.... 6
1 Pea-Lamp	... 6
1 2-way Switch	.... 1.0
1 Battery Holder	.... 9
Screws and Hook-Up Wire	... 6
1 4½ 'C' Battery	.... 1.9
READY BUILT 25/-	..£.1.3.0



THE MORSE CODE

The morse code was originated as a means of sending messages by means of electrical impulses over a wire between two places. Each letter of the alphabet, and each figure is represented by a dot or a dash, or by groups of dots and dashes, for example 'A' is represented by a dot and a dash, 'B' is a dash and three dots, 'E' is just one dot, and so on.

A morse key is used for sending the signals, and in the case of the public telegraph service a sounder makes the signals audible at the receiving end, in the form, of long and short clicks. In wireless telegraphy the signals take the form of long and short buzzes. The army also use a signal flag waved in the hand to send morse messages, dots are represented by short sweeps of the flag, and dashes by long sweeps of the flag.

The Army, Navy, Marine and Coastal Signal Stations also use long and short flashes from signal lamps to send morse messages at night.

LEARNING THE MORSE CODE

In learning the code it is first of all necessary to memorise the groups of dots and dashes which comprise the various letters of the alphabet.

It is advisable for the learner to procure a morse key on which to practice sending, the clicking of the key will enable the learner to become familiar with the peculiar sound of each letter and figure. It is better to think of the rhythmic sounds of the letters rather than of it as consisting of dots and dashes.

When sending morse signals it is of the utmost importance that the dashes be made distinct from dots, and the spacing between the dots, dashes, letters and words require equal care. The importance of the foregoing will be realized when it is remembered that it is not only necessary for you to understand your own signals but also that the person to whom you are sending must be able to translate the signals back into letters and words. Bear in mind the following relationship between dots, dashes and spacing. A dash is three times the length of a dot and the spacing between dots and dashes in a letter is equal to one dot, while between the letters in a word the space equals two dots, and between letters the space equals five dots.

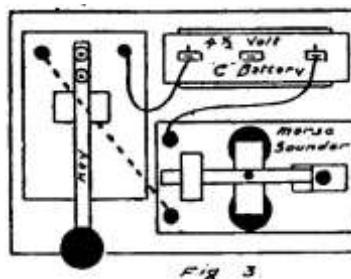
In the early stages of learning to send morse it is good practice to exaggerate the length of the dashes, also the spaces between letters and words, this will help the learner to avoid the fault of clipping dashes and spaces, the signals will be easier to read and the sender will develop a good style. Do not rush your sending, but rather aim at copperplate signals, at approximately the same speed that you are able to receive at. If you will follow this rule your signals will be worth listening to and speed will follow naturally when needed.

USING THE MORSE KEY

Arrange the key near the edge of the table in line with the right arm, sit up straight in the same posture you were taught to adopt at school when writing. Place the tips of the first two fingers on top of the key, the thumb on the side of the key. Keep the knuckles together and the first joints of the fingers vertical. The forearm should be horizontal but not rigid. None of the muscles must be stiff, this would cause writers cramps.

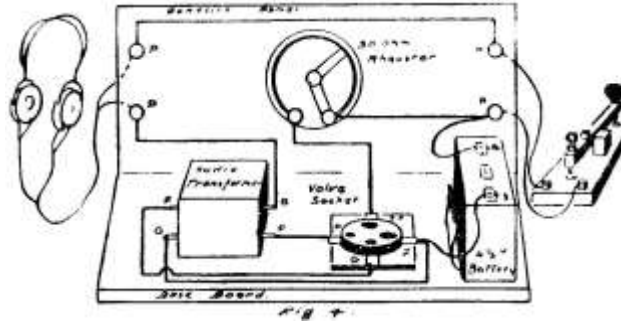
Sounder Set (Fig. 3)

1 Baseboard 9 x 6	....	1.0
1 P.M.G. Type Morse Key	....	19.6
1 P.M.G. Type Morse Sounder		1.15.0
1 Battery Holder	....	9
1 4½ Volt 'C' Battery	....	1.9
Hook-Up Wire and screws	...	6
	READY BUILT, 63/-	.. <u>£2.18.6</u>



Morse Oscillator Practice Set (Fig. 4.)

1 Bakelite Panel 6 x 3	....	9
1 Wood Base Board 6 x 6	....	6
4 Terminals		1.0
1 30 Ohm Rheostat	....	3.6
1 Audio Transformer		10.6
1 U.X. Valve Socket (Baseboard Mounting)		6
2 Yards, Flex Flax Hook-Up Wire		6
1 1-inch Bakelite Knob		6
½ Dozen Wood Screws and Lugs		9
1 Coil Resin Core Solder	....	6
		<u>19.9</u>
	READY BUILT, 25/-	



NECESSARY ACCESSORIES FOR OSCILLATOR

- 1 Triode General Purpose 4-volt Valve from 7/6
- 1 Morse Key. Price 12/6; P.M.G. Type 19/6
- 1 Pair Headphones, 4/11, 9/6, 12/6, 19/6, 30/- and 32/6
- 1 4½ Volt 'C' Battery 1/9 each.

The dots and dashes are made by moving the wrist up and down. A good idea of the action required will be obtained by placing the fingers on the edge of the table as described above and raising and lowering the wrist.

If you study the morse alphabet as set out in the following pages you will note that several ways of memorising the code suggest themselves, for example, opposites:- 'I' is two dots, 'M' is two dashes, 'B' is dash and three dots, 'V' is three dots and a dash, etc., etc.

PRACTICE

Key adjustment. For the first week of practice on the key or until you are familiar with all the characters, have the contacts of the key opened sufficiently to allow a threepenny piece to be passed between them. The spring adjustment should be just sufficient to definitely return the key to the up position, when sending, the key is pressed down with the fingers and lifted up with the thumb; see that there is no side play and that the key operates freely

When you have mastered all the characters and can send them clearly and correctly, the space between the contacts can be reduced a little each week, but do not make the adjustment too fine otherwise the quality of your sending will be impaired.

It is advisable to have a friend to practice with, taking turns at sending and receiving. If possible, avail yourself of any opportunity of obtaining the help and advice of a professional telegraphist, he can point out any mistakes that you may not notice and can give you good practice in receiving, etc. One hour's practice per day is satisfactory, longer periods of practice are not recommended. As you become proficient in receiving you will obtain good practice and considerable interest in copying the morse messages and press that you hear on your radio receiver. In estimating speed of transmission and reception, five letters are reckoned to a word.,

As a final message the writer urges you not to aim at speed, but determine that your sending is going to be a pleasure to copy. "Send copperplate". Speed will come.

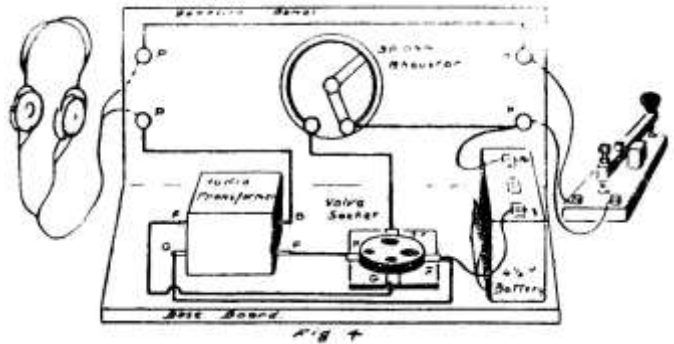
PRACTICE SETS

In the following pages you will find illustrations of various types of practice sets, the reader will be able to select one to meet his particular requirements. The buzzer or sounder sets are most commonly used by learners, but the morse oscillator is an ideal outfit for learners intending to enter the wireless service, the note produced in the headphones connected to an oscillator is exactly the same as that heard in actual reception from a wireless transmitting station.

Fig. 5 illustrates how two morse keys and two buzzers may be connected in conjunction with a small battery and a three wire line, to form two stations. For example; between two rooms or between neighbouring houses, etc. this arrangement is ideal for practice purposes.

Fig. 6 illustrates how two morse keys and two pairs of wireless headphones may be connected together in conjunction with the morse oscillator illustrated in Fig. 4. A three wire line is necessary. Note that the top phone terminal is left unconnected. The system will provide for excellent two-way communications.

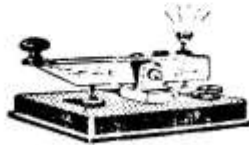
THE MORSE CODE		
THE ALPHABET		
A ---	J K-----	S ---
B ----	L-----	T ---
C -----	M-----	U ----
D -----	N ---	V -----
E -	O -----	W -----
F -----	P -----	X -----
G -----	Q -----	Y -----
H -----	R ---	Z -----
I --		
ACCENTED LETTERS		
Å -----		
Ä or Å -----		
Ç -----		
É -----		
Ë -----		
Ï -----		
Ó -----		
Û -----		
NUMERALS		ABBREVIATED NUMERALS
1 -----		1 ---
2 -----		2 ---
3 -----		3 -----
4 -----		4 -----
5 -----		5 -
6 -----		6 -----
7 -----		7 -----
8 -----		8 ---
9 -----		9 ---
0 -----		0 -
USEFUL PUNCTUATION AND OTHER SIGNS		
Full Stop (.) -----		The length of a dash in time is equal to three dots. The space between dots or dashes equals the time of one dot. Between letters the space equals two dots and between words the space equals three dots.
Comma (,) -----		
Hyphen or Dash (-) -----		
Fraction Bar (/) -----		
Brackets [()] -----		
Break or Double Dash (=) -----		
Interrogation, Note of (?) -----		
Erase (or Error) -----		
End of Message (AR) -----		
Closing Down (SK) -----		
Interval (Wait) -----		
Message Received -----		
Ready to Receive -----		
All Stations Call or CQ -----		
Distress Call or SOS -----		



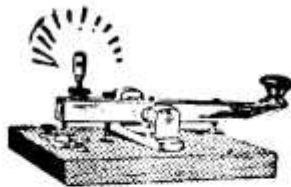
" LIKE-A-FLASH "

MORSE CODE KEYS, SETS & BUZZERS

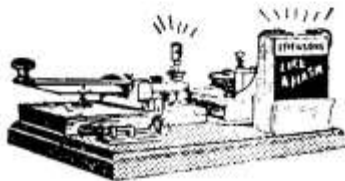
Manufactured by Levenson's Radio, Sydney



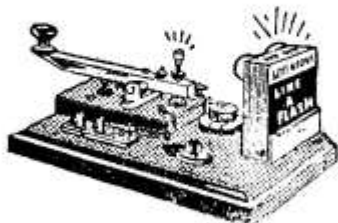
No. 1.—Adjustable Morse Code Key, with long and short tapper arms splendidly made and finished. Strong reliable heavy plated fittings mounted on bakelite moulded base. 3½in. x 2½in. x ½in. Price 12/6



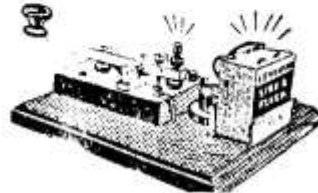
No. 2.—P.M.G. Type adjustable Morse Code Key, strong and reliable; will last a lifetime. Heavy plated fittings on thick solid wooden base 4½in. x 3in. 15/16in. Perfect action. Price 19/6.



No. 3.—Set comprising No. 2 Morse Code Key P.M.G. Type, with light; No. 8 professional De Luxe Buzzer Battery. Throwover Switch for buzzer or light. 8½in. x 6½in. x 1in. use as required. All suitably mounted on wooden baseboard. Price complete ready for use 42/6



No. 4.—P.M.G. No. 2 Morse Key, with adjustable buzzer and light throwover switch (buzzer to light). All mounted on wooden baseboard complete with battery—100% reliable outfit. Price 30/-



No. 5.—Outfit comprises the P.M.G. No. 2 Morse Code Key, with adjustable buzzer and battery all mounted on a stained baseboard, ready for immediate operation. Battery included. Price 27/6.



No. 6.—A real good little outfit which incorporates the No. 1 adjustable Morse Code Key, in moulded bakelite base, with a smart little adjustable buzzer and battery all complete, ready to operate. All mounted on a stained, solid baseboard 8½in. x 6½in. x 1in. compact and neat. Price 22/6



No. 7.—Morse Code Set with No. 1 Key, buzzer and light. All components mounted on solid, stained wooden base, neat and compact with switch for light or buzzer. Complete with battery ready for use. Price 25/-.



No. 1A.—JUNIOR DE LUXE MORSE CODE KEY Chromed Fittings on Wood Base, adjustable all ways. Price 7/11

THE 'Q' CODE

The following is the international code of abbreviations, used exclusively in radio communication.

'Q.R.A. Sydney' means:- My station is located at Sydney. Q.R.A. followed by a 'note of interrogation' (dot dot dash dash dot dot) means:- Where is your station located. This applies to all the 'Q' Code.

When reporting on signal strength the following code is used:

S7 means your C.W. (continuous wave) is a good and strong signal.

R1 means your telegraphy signals are just audible.

1. Signals just audible.
2. Weak signals occasionally readable.
3. Weak clear signals not intelligible.
4. Fair signals easily readable.
5. Moderately strong signals.
6. Good signals.
7. Good and strong signals.
8. Very strong signals.
9. Extremely good signals.

The length of a dash in time is equal to three dots. The space between dots and dashes equals the time of one dot; between letters the space equals two dots and between words the space equals five words.

INTERNATIONAL PREFIXES

AC4	Tibet	EP, EQ	Iran (Ex Persia)
AR	Syria	ES	Estonia
CE	Chile	F3	Martinique. Tahiti
CM	Cuba	F7	New Caledonia
CN8	Morocco	F8	France
CO	Cuba	FA	Algeria
CP	Bolivia	FB8	Madagascar. Reunion
CR4	Cape Verde	F18	French Indo-China
CR5	Portuguese Guinea	FT4	Tunis
CR6	Angola	G	Great Britain
CR7	Mozambique	GI	North Ireland
CR8	Port India	GM	Scotland
CR9	Macao	GW	Wales
CR10	Timor	HA	Hungary
CT1	Portugal	HB	Switzerland
CT2	Azores	HC	Ecuador
CT3	Madeira	HH	Hayti
CX	Uruguay	HI	Dominican Republic
D	Germany	HJ, HK	Colombian Republic
EA	Spain	HP	Panama
EI	Irish Free State	HR	Honduras
EL	Liberia	HS	Siam
HZ	Hedjaz	VP6	Barbados
I	Italy & Colonies	VP7	Bahamas
J	Japan	VP8	Falkland Islands
K4	Porto Rico Virgin Islands	VP9	Bermuda
K5 NY	Canal Zone	VQ2	Northern Rhodesia
K6	Guam, Hawaii, Samoa (US)	VQ3	Tanganyika
K7	Alaska	SU	Egypt

KA	Philippine Islands	VQ4	Kenya
LA	Norway	VQ5	Uganda
LU	Argentina	VQ6	Mauritius
LX	Luxembourg	VR2	Fiji. North Borneo
LY	Lithuania	VR3	Fanning Island
LZ	Bulgaria	VR4	Solomon Islands
MX	Manchuria	VS1, VS2, VS3	Malaya
N	US Naval Communication Reserve Stations	VS5	Sarawak
OA	Peru	VS6	Hong Kong
OH	Finland	VS7	Ceylon
ON	Belgium	VS8	Malaya
OQS	Belgian Congo	VU	India
OX	Greenland	W	United States
OZ	Denmark	XE	Mexico
PA	Netherlands (Holland)	XT, XU	China
PJ	Curacao	XZ	Burma
PK	Netherlands Indies	YA	Afghanistan
PX	Andorra	YI	Iraq
PY	Brazil	YJ	New Hebrides
PZ	Surinam	YL	Latvia
SM	Sweden	YM	Danzig
SP	Poland	YN	Nicaragua
ST	Sudan	YR	Roumania
SV	Greece	YS	Salvador
TA	Turkey	YT, YU	Jugoslavia
TF	Iceland	YV	Venezuela
TG	Guatemala	ZA	Albania
TI	Costa Rica	ZB1	Malta
TS	Saar	ZC1	Transjordanian
U, UE, UK, UX	U.S.S.R.	ZC6	Palestine
VE	Canada	ZD, ZD2	Nigeria
VK	Australia	ZE1	Southern Rhodesia
VO	Newfoundland	ZK1	Cook Island
VP1	British Honduras	ZK2	Biue
VP2	Antigua	ZL	New Zealand
VP3	British Guiana	ZM	British Samoa
VP4	Trinidad	ZP	Paraguay
VP5	Cayman Islands, Jamaica	ZS, ZT, ZU	Union of South Africa

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LEVENSON'S WELL WORTH WONDER BOOK OF SPECIALTIES

8d. Post Free, including 2/-

Rebate Certificate

The most universal Catalogue ever compiled and printed. Brim-full from cover to cover of extraordinary articles: Radio Novelties, Jokes, Games, Tricks, Carnival Goods, Coin-Operated Machines, Money-Making Devices, Banks, Watches, Clocks, Throwing Machines, Scientific Experiments, etc., etc.

Ask a friend for the loan of a sixpenny-piece, but be sure that he marks the coin in such a way that he will be certain to recognise it again. Taking the coin, you place your hand in your pocket and produce a firmly sound



PRESTO

2/9

a mysterious magic, which is also proved sound, it undoes this, and inside the matchbox is a small bag, which has a rubber band firmly securing the neck. Inside the bag will be found the coin he had previously marked! The trick is completely mystifying. Full instructions sent.

PRICE 2/9

So simple, a child can do it.

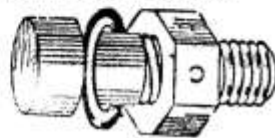
"HINDU"—The Magic Head Cutter



This is one of the cleverest novelties seen for many a long day. How does he do it? His sword leaves no mark. It is made of metal, somewhat the size of a man's watch. It is an optical illusion, yet very few can figure how it is done. It is uncanny and weird. The sword apparently goes right through the neck without cutting the head off. Price 2/9, post FREE!

The Oriental Nut and Bolt Puzzle

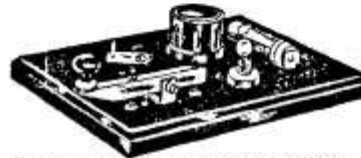
This is one of the latest and most ingenious puzzles. It is a regular Brass Bolt, about 2-in. long, with metal ring and the object is to separate the ring from the bolt. This is difficult if not impossible, without the directions. Price 2/3 (post free).



Morse Code Keys, Sets and Buzzers (Continued)

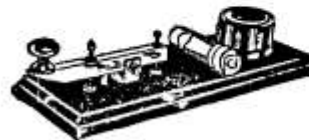


No. 9.—A smart reliable outfit comprising No. 1 Morse Code Key and No. 3 professional buzzer with switch (light to buzzer) and battery all mounted ready for use on a red stained wooden baseboard 8 1/2 in. x 6 1/2 in. x 1 in. only priced at 35/-



No. 10.—JUNIOR DE LUXE MORSE CODE SET Key Buzzer and Light with throw over switch all mounted on Wooden Base, complete with Battery. Price 16/6

No. 15.—Levenson's Morse Code Semaphore Signaling Handbook. Price 1/- Full easy to follow diagrams. A book of simple instructions which the follower will ensure proficiency in Morse Telegraphy in a minimum of time.



No. 11.—JUNIOR DE LUXE MORSE CODE KEY AND BUZZER on Wooden Base, complete with Battery. Price 13/6

Send 8d. in stamps for Levenson's Wonder Book of specialties, Radio Games, Hobbies, Tricks and a host of things new to you. 1/- contains a 2/- rebate coupon which enables you to buy 22/- worth of goods for 2/-.



No. 101.—BUZZER, Metal Cased High Pitched adjustable. Price 4/9



No. 102.—"Like-a-Flash" Bakelite Case High Pitched adjustable Buzzer. Price 4/6



No. 103.—Bakelite Cased adjustable High Pitched Buzzer. Price 5/6



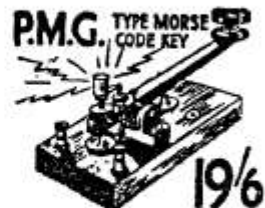
No. 8.—Special High Pitched Buzzer for Professional and Amateur Use easy adjustment. Price 13/-

THE
MAGICIAN'S
OBEDIENT
BALL



An effective Pocket Trick Mystifies Everybody. It will Drop or Stop whenever You Wish. Quite easily performed.

PRICE 1/6



19/6