## **Introductory Case**

KCL Archives K/PP107/1/4/7 & 1/3/26 Letter to Charles Wheatstone from James Clerk

Maxwell and

envelope

Royal Institution Collection, London. First message sent over trans-Atlantic cable / Porthcurno Telegraph Museum

Foyle Special Collections PAMPH. BOX QC102 WHI (KCL Maughan) Whitworth, J (1876). Paper on

measurement-

KCL Archives K/PP107/1/3/4. 8 & 26 New design for battery; shopping list of telegraphic items; Varley's instructions for using electrostatic generator

Wheatstone Collection. Pamphlet Box, TK5841 HAL (KCL Maughan)

Hall and Wells Prospectus,

(1865?).

Reel of blank ticker-tape

KCL Archives K/PP107/11/2/4

Charles Wheatstone: Micrometer

KCL Archives K/PP107/11/1/18 Charles

Wheatstone: Siemens' telegraph cables

KCL Archives K/PP107/1/3/22, 86 New design for battery & list of submarine distances

between countries

Foyle Special Collections PAMPH. BOX GC334 GRE (KCL Maughan)

Meteorological Committee (1872). Currents and surface \_temperature of the North Atlantic\_ Ocean

## **Transmission Case**

KCL Archives K/PP107/11/ 1/5

Charles

Wheatstone: ABC Telegraph transmitter Foyle Special Collections PAMPH BOX TK 5491 SIE 1590771 WHTTSN

Siemens, Halske, and Co. (1860?) Alphabetical Telegraph: Adapted for Railway and Private Purposes

KCL Archives K/PP107/1/3/41

arrangement of dial telegraph keys

K/PP107/1/3/85 sketch for

dial telegraph

KCL Archives K/PP107/11/5/1

Charles Wheatstone: Concertina

KCL Archives K/PP/107/1/3/76 Coastal defences K/PP/107/1/3/87 Telegraphic

rheostat K/PP/107/1/3/92 Circuit diagram with galvanometer

KCL Archives
K/PP/107/1/3/14 Type
printing machine
K/PP/107/1/3/48 The
Tachytele-/teletachy-gra
ph

KCL Archives K/PP107/11/1/8

A Wheatstone
automatic
'Jacquard' telegraph
transmitter

Foyle Special Collections PAMPH. BOX QC544.G2 THO

Elliott Brothers (1858?). Sir W. Thomson's patent \_graded galvanometers.\_

KCL Archives K/PP/107/1/4/44 Diagram of 5 needle telegraph KCL Archives K/PP107/11/1/7

Charles Wheatstone: Telegraph transmitter

KCL Archives K/PP107/1/3/64 Letter from Elec.Telegraph Co. K/PP107/1/3/75 Diagram of sending apparatus K/PP107/1/4/42

Electromag force diagram

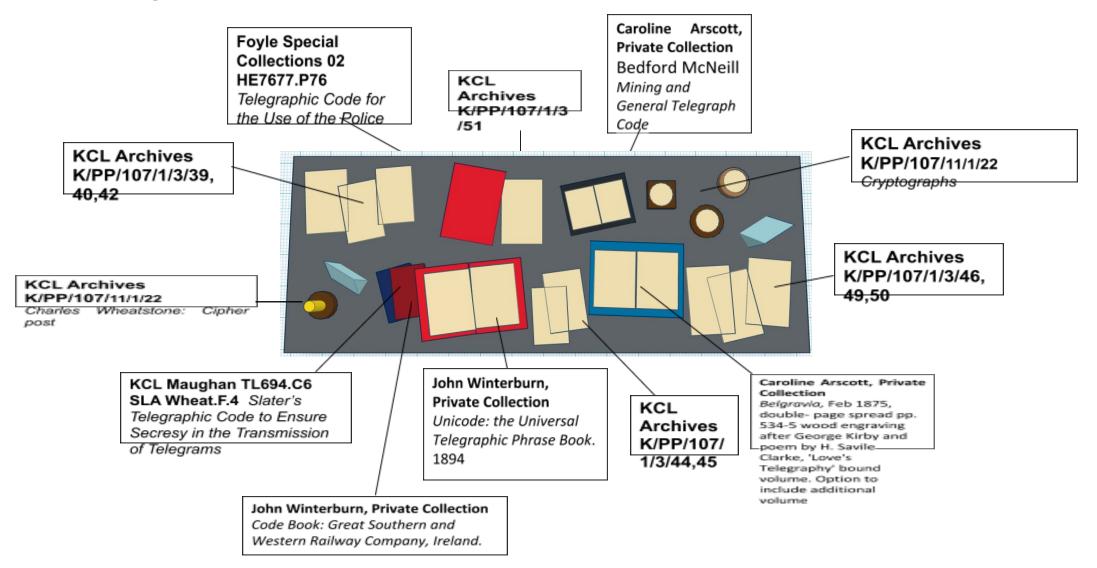
**Foyle Special Collections** 

The Universal Private Telegraph Company (1861). *Professor* Wheatstone's Patents.

KCL Archives K/PP107/11/1/21

A Thomson-style reflecting astatic galvanometer

# **Coding Case**



#### **Resistance Plinth**

><30!=40303536 22 3428272829353026 %+ 22 22 21 22 232635243229 22 363524312832 22 !2733!"#3335" 22 2528! 3032242325

#30232#3335"2836223738223022 3032362728222530"243229223424323822>\*329283523%2263533372823428223430262823433 332628322230323622!2733232822!33323430!34232230!!!3335362432292234332234282263303434283532223382233272823+2222132

• 33542943307233435426233&226235&33530342836226302628352343026221303223344777237282232224 3223428

343326+2222

**(22)** 

423528&0221(2222135! 243128232247)2213444349443434334334550

#### King's College London Archives. K/PP107/11/2/1

Charles Wheatstone: Wheatstone Bridge

Prototype or demonstration model of the 'Wheatstone Bridge' or 'Differential Resistance Measurer' originally devised by Samuel Hunter Christie and further developed and promoted by Wheatstone. An electrical circuit designed to measure unknown resistance by using components with known resistance. Consists of a series of wires and connectors attached to a wooden base in a diamond shape.

2 cm x 43.8 cm x 7.6 cm

King's College London Archives. K/PP107/11/1/19

Charles Wheatstone: Resistance box

Resistance box with for measuring resistance in 1, 2, 4, 8, 16 and 32 mile lengths of telegraph wire. Consists of a wooden box with brass plates and knobs.

14.6 (22.5 open) cm x 24.5 cm x 11.7 cm

#### King's College London Archives. K/PP107/1/4/1-60 (item 34 in folder)

Small document referring to Resistance Box.

#### King's College London Archives. K/PP107/1/3/1-92 (item 17 in folder)

Small document discussing spontaneous charges from unpowered cable.

### King's College London Archives. K/PP107/1/1-79

Small document on phosphorescent effects of submarine cable.