VOLUME II.

CLINICAL RECORDS of CASES,

WITH X-RAY PHOTOGRAPHS and CHARTS.
**Explanation of Signs Used In Charts.**

- **W.V.** = Whispered Voice. This sign indicates an abrupt change in quality or intensity or both in the whispered voice at the lower limit of the spine indicated.

- **B.B.** = Bronchial Breathing. Indicates abrupt change in type of breathing or in intensity at the lower level of the spine indicated.

- **S.V.** = Spoken Voice. Indicates abrupt change in quality of the spoken voice at the lower level of the spine indicated.

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**Symbols:**

- Indicates that a change in quality and intensity of the whispered voice is noted at the base of the triangle. (The heavy horizontal line) This change diminishes in extent with varying rapidity as indicated by the degrees of obliquity of the thin lines.

- The same arrangement is used to indicate the extent of change in the breath sounds and spoken voice. A gradual change takes place, varying in rate over one or several spines.

- Indicates a definite degree of impaired resonance in a given area.

- Indicates a change of resonance as compared with the other side—distinct but not marked.
The type of breathing is indicated in the usual way that has been taught at Edinburgh University for many years—viz.

\[
\begin{align*}
\wedge &= \text{Vesicular Breathing.} \\
\backslash &\slash = \text{Bronchial Breathing.} \\
\approx &\approx = \text{Rhonchi.}
\end{align*}
\]

Glands are indicated by dots of varying size and frequency. The highest well-defined dot in the neck represents the tonsillar gland.

If only fine dots are present the highest is not to be interpreted as the tonsillar gland.

"Expansion and figures below refer to expansion of the lungs at the bases as made out by percussion."
DAVID McGARRY aged 7.

CASE I.
NAME: DAVID MCGARRY aged 7.  CASE I.

HEIGHT: 3 ft. 7 ins.  DREYER'S TABLES.
WEIGHT: 3 st. ½ lb. Class C. Vital Capacity = 1516 cc.
STEM LENGTH: 23¾ ins.  "  "  "  "
CHEST MEASUREMENTS:

Easy Respiration: 21½ ins.  "  "  = 1466 cc.
Full Inspiration: 23 ins.
Full Expiration: 21 ins.
VITAL CAPACITY: 1.10 litres.

PIRQUET SKIN TEST:
Human: negative.
Bovine: negative.

PHYSICAL EXAMINATION:

Prominent Veins on upper part of chest wall are present to a moderate degree.

Vaso-motor paralysis: positive.
Myotatic Irritability: positive, with slight myoedema on the left side.

HEART:
The first sound in the mitral area is impure.

LUNGS:
At the left apex posteriorly the percussion note is impaired. At the right apex in front below the left clavicle.
clavicle the percussion note is also impaired.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a clear cut change in intensity and loss of the articulate element.

Bronchial Breathing is clearly audible to the spine of the fourth dorsal vertebra, below which a sharp change in quality and intensity takes place.

Spoken Voice is clearly audible to the spine of the fourth dorsal vertebra, below which a sharp change in intensity and quality takes place.

EXPANSION OF THE LUNGS AT THE BASE:

Right: 1\(\frac{1}{4}\) ins.

Left: 1 inch.

GLANDS:

There are a few tiny glands just palpable in the cervical region on both sides of the neck.
ALEXANDER SENEWALD aged 8  

CASE II.
NAME: ALEXANDER SENEWALD. AGED 8
CASE II.

HOME: Edinburgh. Father alive.

HEIGHT: 3 ft. 7 1/2 ins. DREYER'S TABLES.

WEIGHT: 3 st. 1 lb. Class C. Vital Capacity = 1532 cc.

STEM LENGTH: 24 3/4 ins. " " = 1599 cc.

CHEST MEASUREMENTS:

Easy Respiration: 22 1/2 ins. " " = 1604 cc.

Full Inspiration: 24 ins.

Full Expiration: 22 ins.

VITAL CAPACITY: 1.10 litres.

PIRQUET SKIN TEST:

Human: Negative.

Bovine: Negative.

PHYSICAL EXAMINATION:

Prominent Veins on upper part of chest are present in mild degree

Vaso-motor paralysis: negative.

Myotatic Irritability: negative.

Very well nourished. The lower aspect of the chest (costal margin) is slightly indrawn.

LUNGS:

The percussion note at the right apex posteriorly is impaired above the spine of the left scapula, and on the right side below the right clavicle.

SPINAL/
SPINAL AUSCULTATION:

Whispered Voice is clearly audible to the spine of the first dorsal vertebra, below which there is a sharp break in intensity, with loss of the articulate element.

Bronchial Breathing is clearly audible to the spine of the first dorsal vertebra, below which there is a sharp change in quality and marked diminution in intensity.

Spoken Voice is clearly audible to the spine of the second dorsal vertebra, below which there is a sharp change in quality and intensity.

EXPANSION of LUNGS at BASE:

Right: \(1\frac{1}{4}\) ins.

Left: 1 in.

GLANDS:

The tonsillar gland on each side is just palpable and below it there is a tiny chain of glands descending to the supra-clavicular region.
Wm. MATHEWSON aged 7.  CASE III.
NAME: Wm. MATHEWSON. aged 7. CASE III.
HOME: Kilconquhar. Father killed in war. Mother deaf and dumb.
HEIGHT: 3 ft. 8 ins. DREYER'S TABLES.
WEIGHT: 3 st. 33 lbs. Class C. Vital Capacity = 1569 cc.
STEM LENGTH: 23 ins. " " "
CHEST MEASUREMENTS:
   Easy Respiration: 21 ins. " " = 1399 cc.
   Full Inspiration: 23½ ins.
   Full Expiration: 20½ ins.
VITAL CAPACITY: 1.05 litres.
PIRQUET SKIN TEST:
   Human: negative.
   Bovine: negative.
PHYSICAL EXAMINATION:
   Prominent Veins on upper part of chest are present in mild degree.
   Vaso-Motor Paralysis: very slight.
   Myotatic Irritability: negative.
LUNGS:
   Slight impairment of percussion note in the left interscapular region.
SPINAL AUSCULTATION:
   Whispered Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break in intensity and loss of the articulate quality.
Bronchial/
Bronchial Breathing is distinctly audible to the fourth dorsal spine, when a sharp change from the bronchial quality takes place with marked diminution in intensity of the sound.

Spoken Voice is clearly audible to the spine of the fifth dorsal vertebra, below which a sharp change in the quality and intensity of the sound takes place.

EXPANSION of the LUNGS at BASE:
   Right: 1 in.
   Left: 1 in.

GLANDS:

The tonsillar glands are palpable on both sides and descending from them, are two chains of tiny, just palpable glands in front.
JAMES COGLAN aged 5.

CASE IV.
NAME: JAMES COGLAN aged 5. CASE IV.


HEIGHT: 3 ft. 8½ ins. DREYER’S TABLES.

WEIGHT: 3 st. 4½ lbs. Class C. Vital Capacity = 1612cc.

STEM LENGTH: 24½ ins. " " " = 1599 cc.

CHEAST MEASUREMENTS:

Easy Respiration: 22½ ins. " " = 1604 cc.

Full Inspiration: 24 ins.

Full Expiration: 22 ins.

VITAL CAPACITY: 1.05 litres.

PIRQUET SKIN TEST:

Human: negative.

Bovine: negative.

PHYSICAL EXAMINATION:

Prominent Veins on the upper aspect of the chest wall are present in mild degree.

Vaso-motor paralysis: positive, in moderate degree.

Myotatic Irritability: negative.

LUNGS:

At the left apex posteriorly there is an impaired percussion note.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible down to the spine of the second dorsal vertebra, below which there is a sharp break in intensity and loss of the articulate quality.

Bronchial Breathing is faintly audible over the spine/
spine of the first dorsal vertebra, below which there is a definite break in intensity and quality.  

Spoken Voice. is clearly audible down to the spine of the third dorsal vertebra, below which there is a sharp break in intensity and quality.

EXPANSION OF THE LUNGS AT THE BASE:

Right: - = 1\(\frac{1}{2}\) ins.

Left: - = 1 ins.

GLANDS:

The tonsillar glands on both sides are distinctly enlarged and easily defined. Below them on both sides there are a few tiny cervical lymph nodes which are just palpable and can also be made out above the clavicles.
ROBERT COGLAN aged 8.

CASE V.
NAME: ROBERT COGLAN  aged 8.  
HEIGHT: 3 ft. 10 ins.  DREYER'S TABLES.  
WEIGHT: 3 st. 6½ lbs.  Class C, Vital Capacity = 1657 cc.  
STEM LENGTH: 25 ins.  "  "  "  "  "  = 1636 cc.  
CHEST MEASUREMENTS:  
Easy Respiration: 22½ ins.  "  "  = 1604 cc.  
Full Inspiration: 24 ins.  
Full Expiration: 22 ins.  
VITAL CAPACITY: 1.40 litres. 
PIRQUET SKIN TEST:  
Human: positive.  
Bovine: positive.  
PHYSICAL EXAMINATION:  
Prominent Veins: on the upper part of the chest are present to a marked degree.  
Vaso-motor paralysis: present to a slight degree.  
Myotatic Irritability: present to a slight degree on the left side.  
There is some degree of Asymmetry of the Chest, the left costal margin showing some degree of bulging (rickety).  There is also some flattening below both clavicles.  He suffers from some degree of bilateral nasal obstruction.  
LUNGS:  
The percussion note below the right clavicle is slightly impaired, also at the right apex posteriorly.  
SPINAL AUSCULTATION:  
Whispered/
Whispered Voice

Bronchial Breathing

These phenomena are all audible to the second dorsal spine, below which there is a clear cut change in the quality and intensity of the sounds.

EXPANSION of the LUNGS at the BASE:

Right: 1\frac{1}{2} ins.

Left: 1 ins.

GLANDS:

The tonsillar gland on both sides is easily palpable. Below this, there are very tiny, cervical nodes running down in chain-like fashion, to the clavicle on each side.
Robert Coglan Aged 8.

Radiogram Taken During Full Inspiration.

N.B. Boy has moved during the taking of this photograph.

Ribs:

Almost equally spaced on both sides, except for slight drooping towards the right apical region.

Heart:

The shadow of the heart is normally placed, but of the globular type.

Lungs, Bronchi and Mediastinum.

The root of the Right Lung shows a faint and elongated shadow. It is differentiated from the right cardiac shadow. There are two or three small opaque dots. From this root area, there is a delicate fan-like shadow, spreading to the apex, mid zone and base of the Lung, corresponding to the lines of the Bronchi. There are, here and there, a few tiny opaque dots present, arranged in annular fashion.

The Root of the Left Lung is not visible behind the heart; but, from the fourth visible inter-space, just above the heart's shadow, a heavier shadow is present, and from it, perpendicular strands arise, which have not the fan-like appearance of the other side. There is a generalised opacity in the mid zone, to some extent accounted for, by the scapular shadow.
ERIC WHITE aged 7.  

CASE VI.
NAME: ERIC WHITE  AGED 7.  CASE VI.
HOME: Glasgow.  Father alive, Mother deaf and dumb.
HEIGHT: 3 ft. 9 ins.  DREYER'S TABLES.
WEIGHT: 3 st. 8 lbs.  Class C. Vital Capacity = 1693 cc.
STEM LENGTH: 23 ins.  " " " " = Below the Scale.
CHEST MEASUREMENTS:
    Easy Respiration: 23 ins.  "  = 1675 cc.
    Full Inspiration: 25 ins.
    Full Expiration: 22 ins.
VITAL CAPACITY: 1.15 litres.
PIRQUET SKIN TEST:
    Human: Positive.
    Bovine: Negative.
PHYSICAL EXAMINATION:
    Prominent Veins in upper part of chest are present in mild degree.
    Vaso-motor Paralysis: Negative.
    Myotatic Irritability: Negative.
LUNGS:
    The percussion note is slightly impaired at the extreme apex of the right lung posteriorly, with broncho-vesicular breathing in this area.
SPINAL AUSCULTATION:
    Whispered Voice is clearly audible to the spine of the second dorsal vertebra, below which there is a sharp break in intensity with loss of the articulate element/
Bronchial Breathing is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp change from the Bronchial quality with marked diminution in intensity.

Spoken Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break in quality and intensity.

EXPANSION OF LUNGS AT BASE:

Right: = $1\frac{3}{4}$ins.

Left: = $1\frac{3}{4}$ins.

GLANDS:

The tonsillar gland is easily palpable on both sides. No other cervical glands are clearly palpable.
WILLIAM MCDONALD aged 8.

CASE VII.
NAME: WILLIAM MCDONALD aged 8. CASE VII.
HOME: Edinburgh. Father and Mother dead.

HEIGHT: 3 ft. 10½ ins. DREYER'S TABLES.
WEIGHT: 3 st. 8 lbs. Class C. Vital Capacity = 1693 cc.
STEM LENGTH: 24½ ins. " " " " = 1527 cc.
CHEST MEASUREMENTS:
  Easy Respiration: 23 ins. " " = 1675 cc.
  Full Inspiration: 24½ ins.
  Full Expiration : 22½ ins.
VITAL CAPACITY: 1.22 litres.

PIRQUET SKIN TEST:
  Human : negative.
  Bovine: negative.
  He has a hard type of skin.

PHYSICAL EXAMINATION:
  Prominent Veins on upper part of chest are absent.
  Vaso-motor Paralysis: positive, in mild degree.
  Myotatic Irritability: Negative.

HEART:
  A short, non-propagated, systolic murmur is audible at the mitral area.

LUNGS:
  The percussion note at the posterior aspect of the left lung above the spine of the Scapula is impaired.

SPINAL AUSCULTATION:
  Whispered/
Whispered Voice is clearly audible to the spine of the second dorsal vertebra, below which there is a clear cut break in intensity and loss of the articulate element.

Bronchial Breathing is clearly audible to the spine of the second dorsal vertebra, below which there is a sharp change in quality and loss of intensity of the sound.

Spoken Voice is clearly audible to the spine of the second dorsal vertebra, below which there is a sharp break in quality and intensity of the sound.

**EXPANSION OF THE LUNGS AT THE BASE:**

- Right: = 1½ ins.
- Left: = 1½ ins.

**GLANDS:**

The tonsillar glands are quite well defined on both sides. From them descend very small glands in a chain spreading out above the clavicles. There are a few tiny glands palpable in the posterior cervical region.
DONALD BROTCHIE aged 9.  CASE VIII.

BREATH SOUNDS MORE FEEBLE THAN ON LEFT SIDE.

BREATH SOUNDS MORE FEEBLE THAN NORMAL.
NAME: DONALD BROTHIE aged 9. CASE VIII.
HOME: Edinburgh. PARENTS: Record not available.
HEIGHT: 4 ft. 1 in. DREYER'S TABLES.
WEIGHT: 3 st. 8½ lbs. Class C. Vital Capacity = 1705 cc.
STEM LENGTH: 25 ins. " " " = 1636 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 23½ ins. " " = 1747 cc.
   Full Inspiration: 25 ins.
   Full Expiration: 22½ ins.
VITAL CAPACITY: 1.46 litres.
PIRQUET SKIN TEST:
   Human: positive +
   Bovine: negative.
PHYSICAL EXAMINATION: Delicate appearance.
   Prominent Veins on upper part of chest - present in marked degree
   Vaso-motor paralysis: negative.
   Myotatic Irritability: present.
LUNGS:
The breath sounds are rather feeble in the right infra axillary region and at the right base than normal.
SPINAL AUSCULTATION:
   Whispered Voice is clearly audible to the third dorsal spine, below which a sharp break takes place due to/
to loss of the articulate element.

**Bronchial Breathing** is audible to the fifth dorsal spine, below which a clear break to vesicular quality and diminished intensity takes place.

**Spoken Voice** not recorded as boy stammers.

**EXPANSION of LUNGS at the BASE:**

- **Right:** 1½ ins.
- **Left:** 1½ ins.

**GLANDS:**

The tonsillar glands on both sides are enlarged, being easily defined and palpable. Below these there is a multiplicity of tiny cervical glands palpable, spreading along the upper border of the clavicle.
CHARLES MARSHALL aged 10. CASE IX.
NAME: CHARLES MARSHALL  AGED 10.  CASE IX.
HOME: Edinburgh.   Father and mother alive.
HEIGHT: 4 feet    DREYER'S TABLES.
WEIGHT: 3 st. 6½ lbs. Class C. Vital Capacity = 1704 cc.
STEM LENGTH: 25 ins.  "  "  "  = 1636 cc.
CHEST MEASUREMENTS:

Full Inspiration: 25½ ins.
Full Expiration: 23½ ins.
VITAL CAPACITY: 1.22 litres.

PIRQUET SKIN TEST:
Human: positive
Bovine: positive.

PHYSICAL EXAMINATION:

Prominent veins on upper aspect of chest wall are present in a mild degree on the right side below the operation wound.

Vaso-motor paralysis: positive, but feeble on left side.

Myototic Irritability: positive, giving slight myoidema on both pectoral muscles.

Teeth of poor quality. Breath heavy, operation for congenital torticollis on right side. There is some flaring out of the costal angle giving an obtuse angle.

LUNGS:

There is an impaired percussion note at the left apex posteriorly down to the spine of the scapula. There is also a slightly impaired note at the left apex above the clavicle.

SPINAL AUSCULTATION:
SPINAL AUSCULTATION:

Whispered voice is clearly audible down to the spine of the third vertebra below which the articulate element rapidly fades, but there is no clear cut break.

Bronchial Breathing is audible to the spine of the third dorsal vertebra and rapidly fades off to the vesicular element below this, but there is not a clear cut break.

Spoken Voice is also clearly audible to the spine of the third dorsal vertebra, but there is a sharp diminution in intensity and quality below this spine.

EXPANSION OF THE LUNGS AT THE BASE:

Right: 1\(\frac{3}{4}\) ins.
Left: 1\(\frac{1}{2}\) ins.

GLANDS:

The tonsillar gland on the left side is small, but definitely palpable. Descending from this is a small chain of tiny lymph nodes which are just palpable. On the right side a short chain of tiny lymph nodes are just palpable. A few tiny lymph nodes are palpable in the right axilla.
N.B. This boy has moved, giving a blurred photograph.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The shadow of the heart is normally placed, but of the globular type.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung is denser than usual, and on its inner aspect is indistinguishable from the right cardiac shadow. Branching shadows, even to the apex, are ill defined. There is one small and one tiny nodule above the root shadow towards the apex.

The root of the left lung is equally ill defined and not clearly distinguishable from the left cardiac shadow. There is a small nodule in the upper part of the root shadow. Branching shadows are ill defined and the scapular shadow obscures the mid zone considerably.
NAME: WILLIAM GEDDES  aged 7.  CASE X.
HOME: Edinburgh.  Father alive
HEIGHT: 3 ft. 9 1/2 ins.  DREYER'S TABLES.
WEIGHT: 3 st. 9 lbs.  Class C. Vital Capacity = 1717 cc.
STEM LENGTH: 25 1/4 ins.  "  "  "  = 1673 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 23 ins.  "  "  = 1675 cc.
   Full Inspiration: 24 1/2 ins.
   FullExpiration:  22 1/2 ins.
VITAL CAPACITY: 1.25 litres.
PIRQUET SKIN TEST:
   Human: positive
   Bovine: positive
PHYSICAL EXAMINATION:
   Prominent Veins in upper part of chest: are present
to a moderate extent and extend to the abdomen.
   Vaso-motor paralysis: Negative.
   Myotatic Irritability: Negative.
HEART:
   There is a slight localised systolic murmur in the
mitral area.  There is no accentuation of the pulmonary
second sound.
LUNGS:
   There is a slightly impaired percussion note at
the/
the apex of the left lung posteriorly, above the spine of the scapula.

SPINAL AUSCULTATION:

Whispered Voice: These three phenomena are clearly audible to the second dorsal vertebra, but below this there is a clear cut change in quality and diminution of intensity.

Bronchial Breathing:

Spoken Voice:

EXPANSION OF LUNGS AT THE BASE:

Right: \( \frac{1}{2} \) inch.

Left: \( 1 \frac{1}{4} \) ins.

GLANDS:

Scar of operation on the left side in the cervical region. Tonsillar glands on both sides are quite clearly palpable. Tiny cervical glands in chain formation are just palpable below these glands, being more distinct on the right side.
CHARLES ROSS aged 9.  CASE XI.

BREATH SOUNDS WEAKER LEFT BASE.

BREATH SOUNDS SLIGHTLY WEAKER THAN NORMAL.
NAME: CHARLES ROSS  
AGED 9.  
CASE XI.

HOME: Edinburgh.

HEIGHT: 3 ft. 10½ ins.  
DREYER'S TABLES.

WEIGHT: 3 st. 9 lbs. Class C. Vital Capacity = 1717 cc.

STEM LENGTH: 25 ins.  
" " "  
= 1636 cc.

CHEST MEASUREMENTS:

Easy Respiration 23½ ins.  
= 1747 cc.

Full Inspiration 24½ ins.

Full Expiration 23 ins.

VITAL CAPACITY: 1.00 Litre.

PIRQUET SKIN TEST: Not carried out - child not available.

PHYSICAL EXAMINATION:

Prominent veins of the trunk are very noticeable from shoulders to pubis, and over a corresponding area posteriorly. These are specially prominent after running.

Vaso-motor paralysis: negative.

Myotatic irritability: Positive, myoidema being produced on the left side.

LUNGS:

The percussion note is definitely dull in the left apical region both back and front. This alteration in note comes to the spine of the scapula posteriorly and the second rib in front. The breath sounds in this area are harsh and vesicular in type, but expiration is not prolonged. At the base of the left lung the breath sounds are much fainter than normal.

SPINAL/
SPINAL AUSCULTATION:

Whispered Voice is audible to the fourth Dorsal spine, below which there is a sharp diminution in intensity, and loss of the articulate element.

Bronchial Breathing shows no sharp change at any spine, but gradually tails off at the fifth Dorsal spine.

Spoken Voice is clearly audible to the spine of the fourth dorsal vertebra, below which a sharp break in quality and intensity takes place.

EXPANSION of the LUNGS at the BASE:

Right: $1\frac{1}{2}$ ins.

Left: 1 inch.

GLANDS:

The tonsillar glands are palpable on both sides, and descending from them are chains of tiny cervical glands stretching above the clavicles.
JOHN ANDERSON aged 10.  CASE XII.
NAME: JOHN ANDERSON  
AGED 10  
CASE XII.

HOME: Aberdeen.  
Father - alive. Mother - Deaf and Dumb.

HEIGHT: 4 feet.  
DREYER'S TABLES.

WEIGHT: 3 st. 9 lbs. Class C. Vital Capacity = 1717 cc.

STEM LENGTH: 26 ins. " " " = 1787 cc.

CHEST MEASUREMENTS:

Easy Respiration: 24½ ins. " " = 1859 cc.

Full Inspiration: 25¼ ins.

Full Expiration: 24½ ins.

VITAL CAPACITY: 1.70 litres.

PIRQUET SKIN TEST:

Human: markedly positive.

Bovine: positive.

PHYSICAL EXAMINATION:

Prominent Veins on upper aspect of chest are present in moderate degree.

Vaso-motor paralysis: negative.

Myotatic Irritability: negative.

Delicate appearance and looks tuberculous.

HEART:

First sound in the mitral area is roughened.

LUNGS:

There is a slight degree of impaired percussion note at the right apex posteriorly where the breathing is/
is broncho-vesicular in type. The breath sounds at the left base are feeble than at the right.

**SPINAL AUSCULTATION:**

*Whispered Voice* is clearly audible down to the spine of the fourth dorsal vertebra, below which there is a distinct break in intensity and loss of the articulate element.

*Bronchial Breathing* is clearly audible to the spine of the sixth dorsal vertebra, below which there is a sharp change from the bronchial quality with marked diminution of intensity.

*Spoken Voice* is clearly audible down to the spine of the fifth dorsal vertebra, below which there is a clear cut change in quality and intensity.

**EXPANSION OF THE LUNGS AT THE BASE:**
- Right: 2½ ins.
- Left: 1½ ins.

**GLANDS:**

The left tonsillar gland is well defined, enlarged and easily palpable. Below this is a short chain of small glands and above the clavicle there are a few tiny lymph nodes.

On the right side the tonsillar gland is just palpable and below this are a few tiny lymph nodes which pass down to the supra clavicular region.
JOHN ANDERSON aged 10.
RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:
The ribs are equally spaced on both sides.

HEART:
The shadow of the heart is normally placed, but tends to the globular type.

LUNGS: BRONCHI and MEDIASTINUM:
The root of the right lung is represented by a small elongated dark shadow, clearly separated from the right border of the cardiac shadow. In this shadow there are one or two small opaque dots. There is a faint annular shadow with two tiny opaque dots in it to the upper and outer aspect of the root shadow. Branching shadows to the apex, mid zone and base of the lung are well defined.

The root of the left lung is ill defined and represented by a few small opaque dots arranged in annular fashion, with a small clear centre. Branching shadows from this area pass perpendicularly to the apex of the lung, and are much less distinct to the mid zone and base of the lung. The scapular shadow tends to darken the left peripheral field.
DAVID BUCHAN aged 9.

CASE XIII.
NAME: DAVID BUCHAN AGED 9. CASE XIII.

HOME: Edinburgh. Father dead.

HEIGHT: 3 ft. 11 ins. DREYER'S TABLES.

WEIGHT: 3 st. 10 lbs. Class C. Vital Capacity = 1754 cc.

STEM LENGTH: 24½ ins. " " " " = 1563 cc.

CHEST MEASUREMENTS:

Easy Inspiration: 23½ ins. = 1621 cc.

Full Inspiration: 25½ ins.

Full Expiration: 23 ins.

VITAL CAPACITY: 1.35 litres.

PIRQUET SKIN TEST:

Human: negative

Bovine: negative.

PHYSICAL EXAMINATION:

Prominent veins in upper part of chest are present in mild degree.

Vasc-motor paralysis: negative.

Myotatic Irritability: negative.

LUNGS:

There is a very slight impairment of percussion note at the extreme left apex posteriorly. There is also a slightly impaired percussion note below the right clavicle.

SPINAL AUSCULTATION:

Whispered Voice is audible to the spine of the third dorsal vertebra, below which there is a sharp break from the articulate quality.

Bronchial/
Bronchial breathing is clearly audible to the third dorsal spine, below which a definite break to the vesicular element takes place.

Spoken Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp change in quality and intensity.

EXPANSION OF LUNGS AT THE BASE:

- Right = 1 inch.
- Left = $1\frac{1}{4}$ ins.

GLANDS:

Tiny tonsillar glands are just palpable on each side. Descending from these are a few tiny cervical nodes, slightly more marked on the right side.
DAVID BUCHAN AGED 9.
RADIOGRAM taken DURING FULL INSPIRATION.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The heart shadow is of the atrophic type, and the right border is not well defined, and is situated too much to the left.

LUNGS:

The root of the right lung shows an indefinite shadow, not quite clearly distinguished from the right cardiac shadow. There are small nodules visible and an annular shadow towards its upper extremity. Branching shadows towards the apex of the lung are ill defined, but are more marked towards the mid zone and base of the lung.

The root of the left lung is only represented by two or three nodules and a small annular shadow above. Branching shadows to the apex and base of the lung are ill defined. The periphery of the left side is darkened by the scapular shadow.
ALEXANDER PARK aged 10. CASE XIV.
NAME: ALEXANDER PARK  
AGED 10. CASE XIV.

HOME: Aberdeen.  
Father - dead.

HEIGHT: 3 ft. 10½ ins.  
DREYER'S TABLES.

WEIGHT: 3 st. 10¼ lbs. Class C. Vital Capacity =1752 cc.

STEM LENGTH: 25¼ ins.  
=1673 cc.

CHEST MEASUREMENTS:

Easy Respiration: 24 ins.  
=1821 cc.

Full Inspiration: 25½ ins.

Full Expiration: 23½ ins.

VITAL CAPACITY: 1.40 litres.

PIRQUET SKIN TEST:

Human: positive.

Bovine: faintly positive.

PHYSICAL EXAMINATION:

Prominent Veins on upper part of chest are absent.

Vaso-motor paralysis: negative.

Myotatic Irritability: negative.

HEART:

The first sound in the mitral area is feeble than normal with a faint degree of roughness at its commencement. The pulmonary second sound is accentuated.

LUNGS: Nothing to note.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible down to the spine/
spine of the third dorsal vertebra, below which there is a sharp diminution in intensity with loss of the articulate element.

**Bronchial Breathing** is clearly audible down to the spine of the third dorsal vertebra, below which it changes in quality abruptly with marked loss in intensity.

**Spoken Voice** is audible as far down as the seventh or eighth dorsal spine, diminishing gradually in intensity, but showing no clear cut change.

**Expansion of the Lungs at the Base:**

- Right: 2 ins.
- Left: 1½ ins.

**Glands:**

The tonsillar glands on both sides are hardly distinguishable and tiny lymph nodes only are palpable, in chain-like fashion, on both sides of the neck, meeting tiny cervical nodes above the clavicles.
ALEXANDER PARK aged 10.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The heart shadow is normally situated, but of rather a globular type suggesting dilatation.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung is rather diffuse, with several opaque areas in it, arranged in annular fashion. The branching shadows from the root to the apex, mid zone and base of the lung are ill defined.

The root of the left lung is ill defined, but shows three opaque dots in it. Branching shadows pass from this perpendicularly into the apical region, but are ill defined in the mid zone and base of the lung.
HOME: Burntisland

NAME: JAMES BROWN aged 9

FATHER dead.

HEIGHT: 3 ft. 11 ins. DREYER'S TABLES.

WEIGHT: 3 st. 11 lbs. Class C. Vital Capacity = 1766 cc.

STEM LENGTH: 25 ins. " " " = 1636 cc.

CHEST MEASUREMENTS:

Easy Respiration: 22\(\frac{3}{4}\) ins. " " = 1639 cc.

Full Inspiration: 25 ins.

Full Expiration: 22\(\frac{1}{4}\) ins.

VITAL CAPACITY: 1.30 litres.

PIRQUET SKIN TEST:

Human: Negative.

Bovine: Negative.

PHYSICAL EXAMINATION:

Prominent Veins on upper part of chest are present in mild degree.

Vaso-motor paralysis: Very slight (\(\frac{1}{2}\))

Myotatic Irritability: Negative.

HEART:

An occasional soft mitral systolic murmur is audible in the mitral area.

LUNGS:

The breath sounds in the right infra axillary region are feebler than normal. At the right apex the breathing is broncho-vesicular in quality.

SPINAL AUSCULTATION:

Whispered/
Whispered Voice is audible to the first dorsal spine, below which the articulate quality is abruptly lost.

Bronchial Breathing is audible to the third dorsal spine, below which there is a clear cut change in quality and intensity, becoming faint broncho-vesicular.

Spoken Voice is audible to the second dorsal spine, below which there is a distinct change in quality and intensity.

EXPANSION of LUNGS at BASES:
- Right: $1\frac{3}{4}$ ins.
- Left: $1\frac{1}{2}$ ins.

GLANDS:

Several well defined small glands are palpable in the tonsillar region. Below these are two chains of tiny glands running downwards to the clavicle.
RAS. BROWN.   aged 9.
RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:
The ribs are equally spaced on both sides, but, together with the clavicle, obliterate the apices.

HEART:
The shadow of the heart is normally placed and of average size.

LUNGS, BRONCHI AND MEDIASTINUM:
The root of the right lung is elongated, well defined and distinct from the right cardiac shadow, but it is not markedly dense. There are two well defined opaque dots situated in the sixth space and over the seventh rib. The branching to the apex and base is clear. There is a well defined annular shadow with opaque dots towards the right base of the lung. The branching to the mid zone is more indistinct and "woolly" in appearance.

The root of the left lung is well defined in one small area over the upper left border of the heart where a small circle of four opaque dots may be seen. Branching fan-like shadows are more clearly defined to apex, mid zone and base of the lung on this side.
JAMES THOMSON aged 8.  CASE XVI.
NAME: JAMES THOMSON    AGED 8.    CASE XVI.
HOME: Edinburgh.   Father alive - Mother dead.
HEIGHT: 3 ft.11½ ins.    DREYER'S TABLES.
WEIGHT: 3 st. 11½ lbs. Class C. Vital Capacity=1778
STEM LENGTH: 25½ ins.  
CHEST MEASUREMENTS:
   Easy Respiration: 24 ins.  
   Full Inspiration: 25½ ins.  
   Full Expiration: 23½ ins.
VITAL CAPACITY: 1.48 litres.
PIRQUET SKIN TEST:
   Human: negative.
   Bovine: negative.
PHYSICAL EXAMINATION:
   Prominent Veins on upper part of chest are 
   present in moderate degree.
   Vaso-motor Paralysis - positive, to moderate 
   degree.
   Myotatic Irritability - negative.
LUNGS: Clear.
SPINAL AUSCULTATION:
   Whispered Voice is clearly audible to spine 
   of second dorsal vertebra, below which, the articulate 
   element is sharply lost.
   Bronchial Breathing over the spines becomes 
   less intense at the third dorsal spine and fades, to 
   assume the vesicular element, about the sixth dorsal 
   spine. There is no clean cut break.
   Spoken
Spoken Voice begins to diminish in intensity from third dorsal spine to sixth dorsal spine, there is no clean cut break as the intensity gradually fades away.

**EXPANSION OF BOTH LUNGS AT THE BASE:**

- **Right** = 1½ ins.
- **Left** = 1 ins.

**GLANDS:**

Cervical Glands can only be made out with great difficulty as one or two tiny Lymph dots. The Tonsilar Glands are not clearly defined.
RIBS:-- The Ribs are equally spaced on both sides.

HEART:-- The shadow of the Heart is normally placed and of average size.

LUNGS, BRONCHI and MEDIASTINUM:--

The Root of the Right Lung is not clearly defined, but is quite distinct from the right cardiac shadow. The root shadow passes imperceptibly into the basal branching shadow and in a less defined way into the apical shadow. The mid zone shows a faint branching shadow. A small opaque area is present below the inner aspect of the sixth rib.

The Root of the Left Lung is ill defined, but below the inner aspect of the sixth rib three tiny opaque dots are visible. The root shadow spreads imperceptibly towards the base of the Lung with one or two tiny opaque areas in its lower aspect. The branching shadow towards apex and mid zone of the Lung is poorly defined.

The scapular shadow obscures to some extent the left mid zone.
NAME: JAMES DICK aged 8. CASE XVII.
HOME: Kirkcaldy. Father dead.
HEIGHT: 3 ft. 10 1/2 ins. DREYER'S TABLES.
WEIGHT: 3 st. 12 lbs. Class C. Vital Capacity = 1790 cc.
STEM LENGTH: 24 1/2 ins. " " " = 1563 cc.
CHEST MEASUREMENTS:
- Easy Respiration: 22 1/2 ins. " " = 1604 cc.
- Full Inspiration: 24 1/2 ins.
- Full Expiration: 22 ins.
VITAL CAPACITY: 1.25 litres.
PIRQUET SKIN TEST:
- Human: negative.
- Bovine: negative.
PHYSICAL EXAMINATION:
- Prominent Veins on upper part of chest are present in moderate degree.
- Vaso-motor paralysis: very slight.
- Myotatic Irritability: negative.
LUNGS:
- Left apex posteriorly, above spine of scapula, shows a very slightly impaired percussion note. The same is present above the left clavicle in front.
SPINAL AUSCULTATION:
- Whispered Voice is clearly audible to the spine of
the first dorsal vertebra, below which there is a gradual diminution in intensity, with loss of the articulate element.

**Bronchial Breathing** is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break in intensity, with loss of the articulate element.

**Spoken Voice** is audible to the spine of the third dorsal vertebra, below which there is a clear cut change of quality and diminution of intensity.

**EXPANSION of the LUNGS at the BASE:**
- Left: $1\frac{3}{4}$ ins.
- Right: $1\frac{1}{2}$ ins.

**GLANDS:**

The *torillar* gland is definitely palpable on both sides, and below it, there is a chain of tiny cervical glands, which are just palpable.
JAMES ANDERSON aged 9.  CASE XVIII.

Breathing right base more feeble than normal.
NAME: JAMES ANDERSON aged 9.  

HOME: Edinburgh.  Father dead.  

HEIGHT: 3 ft. 11 1/2 ins.  

WEIGHT: 3 st. 13 lbs.  Class C. Vital Capacity = 1813 cc.  

STEM LENGTH: 25 ins.  "  "  "  = 1636 cc.  

CHEST MEASUREMENTS:  
   Easy Respiration: 23 1/2 ins.  "  "  = 1784 cc.  
   Full Inspiration: 26 1/2 ins.  
   Full Expiration: 25 ins.  

VITAL CAPACITY: 1.40 litres.  

PIRQUET SKIN TEST:  
   Human: Positive, well marked.  
   Bovine: Positive, well marked.  

PHYSICAL EXAMINATION:  
   Prominent Veins on upper part of chest are present in mild form.  
   Vaso-motor Paralysis: Negative.  
   Myotatic Irritability: Negative.  

LUNGS:  
   The percussion note is slightly impaired at the left apex in front below the Clavicle to the 2nd rib, and posteriorly to the spine of the Scapula. There is also a slightly impaired percussion note in the right interscapular region. Breath sounds are feeble at the right base than at the left.  

SPINAL AUSCULTATION:  
   Whispered/
Whispered Voice shows clearly to the spine of the second dorsal vertebra and below this the articulate element is sharply lost.

Bronchial Breathing gradually tails off to the fourth dorsal spine, there is no clear cut separation.

Spoken Voice is clearly audible to the spine of the second dorsal vertebra below which there is a sharp diminution in quality and intensity.

EXPANSION OF LUNGS AT THE BASES:

Right: 2 ins.

Left: 2 ins.

GLANDS:

Both tonsillar glands are well marked and below them two chains of tiny glands descend to the clavicle, rather more marked on the left than the right.
JAMES ANDERSON AGED 9.

RADIOGRAM of THORAX taken during EASY RESPIRATION.

RIBS:
The ribs are equally spaced on both sides.

HEART:
The heart shadow is normally placed, but of the globular type.

LUNGS, BRONCHI and MEDIASTINUM:

The Root of the Right Lung is clearly defined. In its lower part, the shadow is homogeneous, but distinct from the right lateral border of the heart. In the upper half, it is less clearly defined, and two or three small, opaque dots are present. The branching from this root is ill defined, and of a more homogeneous appearance than usual, which may be due to the fact that the photograph was not taken in full inspiration.

The Root of the Left Lung is less clearly defined beyond the heart shadow, but there are several opaque areas present. The branching from this root is ill defined.
RONALD ALLAN aged 8.  
CASE XIX.
NAME: RONALD ALLAN  AGED 8.  CASE XIX.
HOME: Leith.  PARENTS - Father dead.
HEIGHT: 4 ft. ½ in.  DREYER'S TABLES.
WEIGHT: 3 st. 13½ lbs. Class C. Vital Capacity =1625cc.
STEM LENGTH: 25½ ins.  "  "  "  =1711"
CHEST MEASUREMENTS:
Easy Respiration: 23½ ins.  "  "  "  =1747"
Full Inspiration: 25 ins.
Full Expiration: 23 ins.
VITAL CAPACITY: 1.45 litres.
PIRQUET SKIN TEST:
Human: Negative.
Bovine: Negative.
PHYSICAL EXAMINATION:
Prominent Veins in upper aspect of the chest are present in mild degree.
Vaso-motor Paralysis: Negative.
Myotatic Irritability: Negative.
There is some degree of asymmetry of the chest with some bulging towards the left costal margin and a slight degree of transverse indrawing (Harrison's Sulcus) over the right lower costal region.
LUNGS:
Nothing to note on Auscultation or percussion.
SPINAL AUSCULTATION:
Whispered Voice is audible to the second dorsal spine, below which its articulate quality is lost.
Bronchial/
Bronchial Breathing is clearly audible to the second dorsal spine, where a sharp break to the vesicular quality takes place with marked diminution in intensity.

Spoken Voice is clearly audible to the third dorsal spine, below which the quality changes and it becomes faint.

**EXPANSION of LUNGS at the BASE:**
- Right: \(1\frac{1}{4}\) ins.
- Left: 1 in.

**GLANDS:**

In the cervical region on both sides they are very tiny, the tonsilar glands being hardly palpable.
RONALD ALLAN. AGED 8 YEARS.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

N.B. The whole of the Thorax has not been included on this plate.

RIBS:

The Ribs are equally spaced on both sides.

HEART:

The Heart shadow is normally placed and of average size.

LUNGS, BRONCHI and MEDIASTINUM:

The Root of the Right Lung is fairly clearly defined, elongated, and the shadow is quite distinct from the right heart shadow. There are two small opaque dots just on, and below, the sixth rib. The shadow at the Root of the Lung passes almost imperceptibly into the fan-like shadow corresponding to the bronchi which passes to the apex, mid zone and base of the Lung. Just below the sixth rib, 2cm. from the border of the heart shadow, there is a small annular shadow.

The Root of the Left Lung is much more ill defined, branching is obliterated by the crossing of the rib shadows and the scapula. One small opaque dot is visible in the sixth space. The appearance of hyper-illumination at the base - specially the left base - is merely a contrast to the shadow above and cannot be regarded as pathological as it does not show up in the negative.
NAME: JOSEPH GALT AGED 7.
HOME: Edinburgh. Father dead.
HEIGHT: 3 ft.$\frac{9}{2}$ ins.
STEM LENGTH: 25$\frac{1}{2}$ ins. " " = 1711 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 24 ins. " = 1821 cc.
   Full Inspiration: 25$\frac{3}{4}$ ins.
   Full Expiration: 23$\frac{3}{4}$ ins.
VITAL CAPACITY: 1.33 litres.
PIRQUET SKIN TEST:
   Human: Negative.
   Bovine: Negative
PHYSICAL EXAMINATION:
   Prominent Veins on upper aspect of the chest are present in minor degree.
   Vaso-motor Paralysis: Positive.
   Myotatic Irritability: Negative.
LUNGS:
   The right apex below the clavicle shows an impaired percussion note.
SPINAL AUSCULTATION:
   Whispered Voice is clearly audible down to the spine of the third dorsal vertebra, below which there is a sharp break in intensity & loss of the articulate/
Articulate element.

**Bronchial Breathing** is clearly audible down to the spine of the third dorsal vertebra, below which there is a sharp change in the quality and intensity of the sound.

**Spoken Voice** is clearly audible down to the spine of the third dorsal vertebra, below which it fades in intensity rapidly, but not in clear cut fashion as with the other two phenomena.

**EXPANSION OF THE LUNGS AT THE BASES:**

- Right: = 1½ ins.
- Left: = 1 ins.

**GLANDS:**

The **tonsillar** gland is clearly palpable on both sides of the neck, but is not unduly enlarged. Below these glands there are a few tiny cervical nodes on both sides which are just palpable.
NAME: DOUGLAS THORBURN  aged 8.  CASE XXI.

HOME: Edinburgh. Father dead.

HEIGHT: 4 ft. ½ inch. DREYER'S TABLES.

STEM LENGTH: 25½ ins. " " " " = 1711 cc.

CHEST MEASUREMENTS:

Easy Respiration: 22½ ins. " " = 1604 cc.
Full Inspiration: 24½ ins.
Full Expiration: 23 ins.

VITAL CAPACITY: .94 litres.

PIRQUET SKIN TEST:

Human: negative.
Bovine: negative.

PHYSICAL EXAMINATION:

Prominent Veins on upper part of chest wall are present in minor degree.

Vaso-motor paralysis: positive
Myotonic Irritability: negative.

LUNGS:

The right apex below the clavicle shows an impaired percussion note.

SPINAL AUSCULTATION:

WHISPERED Voice is clearly audible down to the spine/
spine of the second dorsal vertebra, below which there is a sharp break in intensity and loss of the articulate quality.

**Bronchial Breathing** is clearly audible down to the spine of the second dorsal vertebra, below which there is a sharp break in intensity and quality of the sound.

**Spoken Voice** is clearly audible down to the spine of the third dorsal vertebra, below which there is a sharp break in intensity and quality of the sound.

**Expansion of the Lungs at the Base:**

- Right: $1\frac{3}{4}$ ins.
- Left: $1\frac{3}{4}$ ins.

**Glands:**

The tonsillar glands are small, but definitely palpable on both sides of the neck. Descending from these are a few tiny cervical nodes which are just palpable and are present above the clavicles.
ALEXANDER MACPHERSON aged 9.  CASE XXII.

EEBLE BREATHSOUNDS AT BOTH BASES.
NAME: ALEXANDER MACPHERSON aged 9. CASE XXII.
HOME: Edinburgh. Father dead.
HEIGHT: 4 ft. 2½ ins. DREYER'S TABLES.
STEM LENGTH: 26½ ins. " " " = 1866 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 23½ ins. " " = 1784 cc.
   Full Inspiration: 25 ins.
   Full Expiration: 23 ins.
VITAL CAPACITY: 1.40 litres.
PIRQUET SKIN TEST:
   Human: negative.
   Bovine: negative.
PHYSICAL EXAMINATION:
   The boy is suffering from a mild degree of nasal catarrh with consequent nasal obstruction.
   Prominent Veins on upper part of chest are present in mild degree.
   Vaso-motor paralysis: present.
   Myotatic Irritability: present, with myoidema on both sides.
LUNGS:
   There is a slightly impaired percussion note at the left apex posteriorly stretching down to the spine of the left scapula. A few rhonchi are audible in the right infra axillary region. The respiratory murmur at both bases is feeble. When he breathes through his nose, medium bronchial breathing is audible in both infra/
infra axillary regions. This is not audible when breathing through the mouth.

SPINAL AUSCULTATION:

Whispered Voice is audible down to the spine of the third dorsal vertebra, below which there is a clear cut break with loss of the articulate element.

Bronchial Breathing is clearly audible to the spine of the third dorsal vertebra, below which there is a clear cut change to the vesicular quality and diminished intensity of the sound.

Spoken Voice shows no clear cut change in quality or intensity. There is a gradual fading away as one goes downwards.

EXPANSION OF THE LUNGS AT THE BASE:

Right = 1\(\frac{5}{8}\) ins.

Left = 1\(\frac{3}{4}\) ins.

GLANDS:

The tonsillar gland on both sides is easily palpable, also the gland below it which is, however, much smaller. There is a small chain of tiny cervical glands below these glands on both sides.
ALEXANDER MACPHERSON AGED 9.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

N.B. Whole of thorax is not included in this photograph.

RIBS:
The ribs on the right side tend to slope downwards rather more than those on the left side.

HEART:
The heart shadow is normally situated and of average size.

LUNGS, BRONCHI and MEDIASTINUM:
The root of the right lung is well defined, specially in its lower half. The shadow is elongated and at one point is indistinguishable from the cardiac shadow. In the upper part of the hilus shadow, there is a small clear circle, surrounded by tiny, dark, opaque areas. The fan-like branching to the apex, mid zone and base of the lung, is clearly defined.

The root of the left lung is less clearly defined, but definite density is noticed, appearing over the upper part of the cardiac shadow, branching in nature, and continuing into the usual apical branching, along the bronchial lines. There are several, tiny, opaque areas, scattered throughout the commencement of the branching shadows. The branching to apex and base of the lung is well defined, but less so to the mid zone of the lung.
NAME: THOMAS DAVIDSON    AGED 7. CASE XXIII.

HOME: Edinburgh. Father dead.

HEIGHT: 4 ft. 3 in. DREYER'S TABLES.

WEIGHT: 4 st. 7 lb. Class C. Vital Capacity = 1849 cc.

STEM LENGTH: 25 1/2 ins. " " " = 1711 cc.

CHEST MEASUREMENTS:

Easy Respiration: 23 ins. " = 1675 cc.

Full Inspiration: 25 ins.

Full Expiration: 22 1/2 ins.

VITAL CAPACITY: 1.80 litres.

PIRQUET SKIN TEST:

Human: Positive.

Bovine: Positive.

PHYSICAL EXAMINATION:

Prominent Veins in upper part of chest are present in mild degree.

Vaso-motor Paralysis: very slight.

Myotatic Irritability: negative.

There is some flattening below both clavicles.

LUNGS:

There is very slight impairment of percussion note at the left apex posteriorly, also over the third rib on the left side just outside the mid-clavicle line.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible to the third dorsal spine, below which there is a sharp break in intensity with loss of the articulate element Bronchial.
Bronchial Breathing is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break in quality and marked diminution in intensity of the sound.

Spoken Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break in quality and intensity of the sound.

EXPANSION of the LUNGS at the BASES:

- Right: $1\frac{3}{4}$ ins.
- Left: $1\frac{1}{4}$ ins.

GLANDS:

The tonsillar glands are easily palpable on both sides and chains of tiny glands descend on both sides from these tonsillar glands.
HUGH WEBSTER aged 9.

CASE XXIV.
NAME: HUGH WEBSTER. AGED 9. CASE XXIV.
HOME: Greenock. PARENTS - Father dead.
HEIGHT: 4 ft. \( \frac{1}{2} \) in. DREYER'S TABLES.
WEIGHT: 4 st. 1 lb. Class C. Vital Capacity = 1661 cc.
STEM LENGTH: 25 ins. " " " =-1636 cc.
CHEST MEASUREMENTS:
  Easy Respiration: 25\( \frac{1}{2} \) ins." =-1747 cc.
  Full Inspiration: 26 ins.
  Full Expiration: 23 ins.
VITAL CAPACITY: 1.65 litres.
PIRQUET SKIN TEST:
  Human: Negative.
  Bovine: Negative.
PHYSICAL EXAMINATION:
  Prominent Veins on upper part of chest are present in mild degree. They are also present on pos-
terior aspect of chest.
  Vaso-motor Paralysis: Negative.
  Myotatic Irritability: Negative.
  There is a mild degree of nasal obstruction, more marked on left side.
LUNGS:
  Below the left clavicle the percussion note is slightly impaired. In the infra-axillary region the
breath sounds are distinctly fainter than normal.
The left apex posteriorly shows a few fine rhonchi.

**SPINAL AUSCULTATION:**

_Whispered Voice_ is clearly audible to the spine of the seventh cervical vertebra, below which a sharp break in intensity takes place with loss of the articulate element.

_Bronchial Breathing_ is audible to the spine of the seventh cervical vertebra, below which a sharp change in quality and intensity takes place.

_Spoken Voice_ is audible to the spine of the seventh cervical vertebra, below which a sharp change in quality and intensity takes place.

**THE EXPANSION AT THE BASE OF THE LUNGS:**

- **Right:** 1½ ins.
- **Left:** 1 in.

**GLANDS:**

The tonsillar gland on each side is very tiny and hardly distinguishable as such. There is a chain of tiny cervical glands both anteriorly and posteriorly in the normal glandular areas of the neck.
NAME: JAMES HICKIE AGED 10. CASE XXV.
HOME: Edinburgh. Father dead.
HEIGHT: 4 ft. 1\(\frac{1}{2}\) in. DREYER'S TABLES.
WEIGHT: 4 st. 11 lb. Class C. Vital Capacity = 1861 cc.
STEM LENGTH: 25\(\frac{3}{4}\) in. " " " = 1749 cc.
CHEST MEASUREMENTS:
Easy Respiration: 24 ins.
Full Inspiration: 26\(\frac{3}{4}\) ins.
Full Expiration: 23\(\frac{1}{2}\) ins.
VITAL CAPACITY: 1.45 Litres.
PIRQUET SKIN TEST:
Human: Negative
Bovine: Negative.
PHYSICAL EXAMINATION:
Prominent Veins in upper part of chest are present in mild degree.
Vaso-motor Paralysis present, but very slight.
Myotatic Irritability present, small myoidema on left side.
LUNGS:
The percussion note at the left apex is impaired in front to the first interspace. Posteriorly the left apex is also impaired on percussion. In the left interscapular region the percussion note is slightly impaired throughout, and again toward the left base, there is some impairment of note. The respiratory murmur throughout posteriorly, is of a more bronchial quality than normal, but the expiratory murmur is vesicular.
SPINAL/
SPINAL AUSCULTATION:

Whispered Voice is audible to the spine of the third dorsal vertebra, below which there is a sharp break from the articulate quality.

Bronchial Breathing is audible to the fourth dorsal spine, below which there is a sharp change to the vesicular element and marked diminution in intensity.

Spoken Voice is clearly audible to the spine of the fourth dorsal vertebra, below which there is a sharp change in quality and intensity.

EXPANSION of the LUNGS at the BASE:

Right: $1\frac{1}{2}$ ins.

Left: 1 in.

GLANDS:

The tonsillar glands on both sides are clearly defined, but not unduly large. A chain of small glands is palpable, on each side of the neck downwards, to the upper border of the clavicle. There are two or three small glands in the right axilla.
JAMES HICKIE AGED 10.

RADIOGRAM taken during FULL INSPIRATION.

N.B. It will be noted there are two defects in this negative, viz: "scratching" and pin holes.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The heart shadow is normally placed and of average size.

LUNGS, BRONCHI and MEDIASTINUM:

The Root of the right Lung is ill defined, and its inner aspect is quite clear of the right border of the heart shadow. Scattered throughout this hilus region, however, are several well defined, opaque dots much denser and larger than seen in most of the other photographs. They give the appearance of density to the root area, but are clearly defined from the general hilus shadow, this being more clearly seen in the negative than in the print submitted. Annular shadow formation is well seen in and around this root area. Branching towards the apex, mid zone and base of the Lung, seen along the bronchial lines, in fan-like arrangement, almost imperceptibly from the hilus region. The Root of the left Lung is not clearly defined, and appears more as the commencement of the usual/
usual branching shadow, along the bronchial lines to the apex, midzone and base of the lung. There are, however, a string of opaque dots, scattered along the line of the lung root, towards the base. The clear area at the right base is not perceptible in the negative, and is probably a printing defect.
JACKSON LEITCH aged 10. CASE XXVI.
NAME: JACKSON LEITCH. AGED 10. CASE XXVI.

HOME: Aberdeen. Father and Mother deaf & dumb.

HEIGHT: 4 ft. $\frac{1}{2}$ in. DREYER'S TABLES.

WEIGHT: 4 st. $\frac{1}{2}$ lbs. Class C. Vital Capacity = 1673 cc.

STEM LENGTH: 25 $\frac{1}{2}$ ins. " " " = 1673 cc.

CHEST MEASUREMENTS:

Easy Respiration: 24$\frac{1}{2}$ ins. " " = 1897 cc.

Full Inspiration: 26 ins.

Full Expiration: 23$\frac{3}{4}$ ins.

VITAL CAPACITY: 1.50 litres.

Human: Markedly positive

Bovine: Positive.

PHYSICAL EXAMINATION:

Prominent veins on upper aspect of the chest are present to a moderate degree.

Vaso-motor paralysis: - Positive.

Myotatic Irritability: - Positive, with a slight degree of myoidema over the left pectoral muscle.

LUNGS:

There is an impaired percussion note over the right apical region anteriorly and posteriorly. There is also a slight degree of impaired note in the right interscapular region.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible down to the spine of the second dorsal vertebra, below which it loses rather/
rather sharply its articulate quality.

**Bronchial Breathing** is clearly audible down to the spine of the second dorsal vertebra, below which it gradually changes to the vesicular element which becomes definitely audible about the fifth dorsal spine.

**Spoken Voice** is clearly audible down to the spine of the fifth dorsal vertebra, below which there is a sharp diminution in quality and intensity.

**EXPANSION of the LUNGS at the BASE:**

- Right: $1\frac{1}{2}$ ins.
- Left: $1\frac{1}{4}$ ins.

**GLANDS:**

Small tonsillar glands are easily palpable on both sides of the neck, below this, on the left side, there is a small mass of glands which are easily palpable, but not visible. There are a few, tiny, supra-clavicular glands; on the right side, there is one small gland easily palpable, just outside the Sterno-mastoid, and below this, tiny, supra-clavicular glands are just palpable.
N.B. 'pin-hole' plate: The Boy has moved slightly giving a blurred photograph.

RIBS:

The Ribs are equally spaced on both sides.

HEART:

The shadow of the heart is normally placed, but of the globular type, the right side being distended.

LUNGS, BRONCHI and MEDIASTINUM:

The Root of the Right Lung: shows an elongated shadow clearly defined from the shadow of the right cardiac border. At the upper extremity there is a small dark annular shadow with opaque dots in it. Branching shadows to the apex, mid zone and base of the Lung are not seen.

The Root of the Left Lung is small and formed by a small annular shadow which is dense on the medial aspect. From this area perpendicular shadows arise to the apex showing tiny opaque dots. Branching shadows to the mid zone and base of the Lung are ill defined.
WILLIAM ALLAN aged 10.  CASE XXVII.
NAME: WILLIAM ALLAN  AGED 10  CASE XXVII.
HOME: Leith.  Father dead.

HEIGHT: 4 ft. 2½ ins.  DREYER'S TABLES.
STEM LENGTH: 25 ins.  "  "  "  = 1636 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 24½ ins.  "  "  = 1897 cc.
   Full Inspiration: 26 ins.
   Full Expiration: 24 ins.
VITAL CAPACITY: 1.45 litres.

PIRQUET SKIN TEST:
   Human: positive.
   Bovine: positive.

PHYSICAL EXAMINATION:
   Prominent Veins in the upper aspect of the chest are present in mild degree.
   Vaso-motor paralyis: positive.
   Myotatic Irritability: negative.
   The spinal region shows increase of hair. He has a delicate nervous appearance and looks tuberculous.

HEART:
   The first sound in the mitral area is impure.

LUNGS:
   At the right apex there is an impaired percussion note. In the right interscapular region the percussion note/
note is slightly impaired.

SPINAL AUSCULTATION:

*Whispered Voice* is clearly audible down to the spine of the third dorsal vertebra, below which a sharp break in intensity is recognised with loss of the articulate element.

*Bronchial Breathing* is clearly audible down to the fourth dorsal spine; below this the breath sounds gradually diminish in intensity and quality over the fifth and sixth dorsal spines without any clear cut demarcation.

*Spoken Voice* is clearly audible down to the spine of the third dorsal vertebra, below which a sharp break in intensity is recognised with loss of the articulate element.

EXPANSION OF THE LUNGS AT THE BASE:

Right: 2\(\frac{1}{4}\) ins.

Left: 1\(\frac{1}{2}\) ins.

GLANDS:

The tonsillar gland is well defined on both sides and easily palpable; below this there are two chains of small, easily palpable glands. In both supra clavicular regions tiny lymph nodes are palpable.
WILLIAM ALLAN aged 10.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:

The apical ribs on the left side appear to be placed closer together than on the right side.

HEART:

The shadow of the heart is normally placed and of average size.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung shows an elongated ill defined shadow distinct from the shadow of the right cardiac border, and passing imperceptibly into the apical, mid zone and basal lung shadows.

In the lower and central aspect of this root shadow small opaque dots are to be seen. The branching shadows to the apex, mid zone and base are well defined.

The root of the left lung is represented chiefly by an annular shadow in which there are several tiny opaque dots. Branching shadows from this region proceed to the apex in perpendicular fashion and are well defined. Branching shadows can also be seen to the mid zone and base of the lung. The left scapula obscures the peripheral field to some extent.
NAME: WILLIAM MACPHERSON. AGED 8. CASE XXVIII.

HOME: Edinburgh. Father dead.

HEIGHT: 4 ft. 3½ ins. DREYER'S TABLES.

WEIGHT: 4 st. 2 lbs. Class C. Vital Capacity = 1884 cc.

STEM LENGTH: 27 ins. " " " = 1946 cc.

CHEST MEASUREMENTS:

- Easy Respiration: 24½ ins. " " = 1859 cc.
- Full Inspiration: 26 ins.
- Full Expiration: 23½ ins.

VITAL CAPACITY 1.52 litres.

- Human: Positive.
- Bovine: Faintly positive.

PHYSICAL EXAMINATION:

- Prominent Veins on upper aspect of the chest are present in mild degree.
- Vaso-motor Paralysis: positive, but slight in degree.
- Myotatic Irritability: negative.

LUNGS:

There is a very slight impairment to the percussion note, just below the right clavicle.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible down to the spine of the fourth dorsal vertebra, below which there is a sharp diminution in intensity, with loss of the articulate element.

Bronchial/
Bronchial Breathing is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp change in quality and diminution of intensity.

Spoken Voice is clearly audible to the third dorsal spine, below which there is a sharp change in intensity and quality.

EXPANSION of the LUNGS at the BASE:

Right: 1 in.
Left : 1 in.

GLANDS:

The tonsillar gland is easily palpable on the left side, below which is a short chain of much smaller glands, meeting still smaller glands lying above the clavicle.

The tonsillar gland on the right side is just palpable, and below this, there is a chain of tiny glands continuous with tiny glands above the clavicle.
WILLIAM MACPHERSON. Aged 8 Years.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

N.B. This boy has moved causing a general blurred appearance of the photograph.

RIBS:

There is a tendency for the ribs on the right side to be more closely placed than on the left side.

HEART:

The shadow of the Heart is centrally placed and of average size.

LUNGS, BRONCHI and MEDIASTINUM:

The Root of the Right Lung in its central part is well defined, but not unduly dense, its shadow being clear from that of the heart. There are many small opaque dots present specially to the upper and outer part of the root shadow. Branching shadows to the apex, mid zone and base of the Lung are ill defined.

The Root of the Left Lung is poorly defined, being represented more by small opaque dots arranged in annular fashion. Branching shadows from the root are poorly defined.
ROBERT GAULT aged 10.  CASE XXIX.
NAME: ROBERT GAULT. AGED 10. CASE XXIX.

HOME: Edinburgh. Father dead.

HEIGHT: 4 feet. DREYER'S TABLES.

WEIGHT: 2½ ins. 4 st. 2½ lbs. Class C. Vital Capacity =1896 cc.

STEM LENGTH: 25½ ins. " " " 1711 cc.

CHEST MEASUREMENTS:


Full Inspiration: 26½ ins.

Full Expiration: 23½ ins.

VITAL CAPACITY: 1.80 litres.

PIRQUET SKIN TEST:

Human: faintly positive.

Bovine: negative.

PHYSICAL EXAMINATION:

Prominent Veins in the upper aspect of the chest wall are present in moderate degree.

Vaso-motor paralysis: feebly positive.

Myotatic Irritability: negative.

LUNGS:

At the apex of the right lung posteriorly and anteriorly there is an impaired percussion note. The breathing in front shows a vesicular type with prolonged expiration. In the right interscapular region the percussion note is slightly impaired. The breath sounds at/
at the right base are fainter than normal with a cog-wheel type of inspiration.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible down to the spine of the third dorsal vertebra, below which a sharp break in intensity is recognised with loss of the articulate element.

Bronchial Breathing is audible down to the spine of the third dorsal vertebra, below which there is a sharp change from the bronchial quality and sharp diminution in intensity.

Spoken Voice is audible down to the third dorsal spine below which there is a sharp change in intensity and quality.

EXPANSION OF THE LUNGS AT THE BASE:

Right: 2 ins.
Left: 1½ ins.

GLANDS:

The tonsillar glands on both sides are well marked and easily palpable. Descending from these are chains of tiny glands which come down to the supra clavicular regions on both sides. There are a few small glands in the left axilla.

R O B E R T  G A U L T  A G E D  1 0.

N. B. The whole of thorax not included.

R I B S:

The ribs are equally spaced on both sides, although the asymmetry of the photo suggests drooping of the ribs on the left side.

H E A R T:

The shadow of the heart is normally placed and of average size, except that there is a slight undue prominence in the lower aspect of the right border.

L U N G S, B R O N C H I  a n d  M E D I A S T I N U M:

The root of the right lung is ill defined, but is clearly separated from the right border of the cardiac shadow. There is, however, a double annular shadow at the centre of the root, the medial one being darker and smaller than the lateral one beside it, the latter being faint and indistinct. Branching shadows to the apex, mid zone, and base of the lung, are clearly seen, but of rather a mottled appearance.

The root of the left lung is represented by a small annular shadow with tiny opaque dots in it. From this area, perpendicular branching shadows are seen to the apex, and to a less marked degree, to the mid zone and base of the lung. The left scapular shadow darkens the peripheral field.
GEORGE ANDERSON aged 12. CASE XXX.
NAME: GEORGE ANDERSON AGED 12. CASE XXX.

HOME: Aberdeen. Father alive - Mother deaf and dumb.

HEIGHT: 4 ft. 2 1/2 ins. DREYER'S TABLES.
WEIGHT: 4 st. 3 1/8 lbs. Class C. Vital Capacity = 1919 cc.
STEM LENGTH: 27 ins. " " " = 1946 cc.

CHEST MEASUREMENTS:
- Easy Respiration: 24 1/2 ins. = 1897 cc.
- Full Inspiration: 26 1/2 ins.
- Full Expiration: 24 ins.

VITAL CAPACITY: 1.60 litres.

PIRQUET SKIN TEST:
- Human: positive.
- Bovine: faintly positive.

PHYSICAL EXAMINATION:
- Prominent veins on the upper part of the chest are present in moderate degree.
- Vaso-motor paralysis: positive.
- Myotatic Irritability: negative.

LUNGS:
- There is an impaired percussion note below the right clavicle to the second rib. In this area, the breathing is faintly vesicular. There is also a slight degree of impairment at the extreme apex of the right clavicle, posteriorly.

SPINAL AUSCULTATION:
- Whispered voice is clearly audible, down to the/
the fourth dorsal spine, below which there is a gradual loss of the articulate element with loss of intensity. There is no clear cut break.

**Bronchial breathing** is audible, rather faintly over the first dorsal spine, and then increases in intensity, over the next three spines, to tail off gradually in quality and intensity.

**Spoken voice** is clearly audible to the fourth dorsal spine, and then diminishing gradually in quality and intensity over the next two spines.

**Expansion of the Lungs at the Base:**
- Right: 1 1/4 ins.
- Left: 1 1/2 ins.

**Glands:**
- The right tonsillar gland is well defined, and easily palpable. Descending from it is a chain of tiny lymph nodes, which meet those of a similar size above the clavicle.

- The left tonsillar gland is easily palpable, but only half the size of the right sided one. Descending from it, in a delicate chain, are tiny, lymph nodes, which meet those of a similar size, above the clavicle.
RIBS:

The ribs tend to be placed more closely together on the left side than on the right side.

HEART:

The heart shadow is normally placed and of average size.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung is more of a lattice work than a shadow, and is continuous with the branching shadows going to the apex, mid zone and base of the lung. There are one or two very tiny opaque dots present, towards the upper part of the root region.

The root of the left lung is rather more clearly defined, below the inner aspect of the sixth rib. The branching shadows from this area, are also more clearly defined. Towards the mid zone and base of the lung, they are less certain. There are one or two tiny, opaque dots visible towards the root. The scapular shadow tends to darken the whole of the outer aspect of this lung.
ROBERT MARSHALL aged 11.  CASE XXXI.
NAME: ROBERT MARSHALL AGED 11. CASE XXXI.
HOME: Edinburgh. Father and Mother alive
HEIGHT: 4 feet. DREYER'S TABLES.
WEIGHT: 4 st. 5 lbs. Class C. Vital Capacity = 1954 cc.
STEM LENGTH: 25 ins. " " " = 1636 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 25½ ins. " " = 2053 cc.
   Full Inspiration: 27½ ins.
   Full Expiration: 24½ ins.
VITAL CAPACITY: 1.5 litres.
PIRQUET SKIN TEST:
   Human: positive.
   Bovine: positive.
PHYSICAL EXAMINATION:
   Prominent Veins on upper aspect of chest are present in a very minor degree.
   Vaso-motor paralysis: negative
   Myotatic Irritability: negative.
LUNGS: Nothing to note.
SPINAL AUSCULTATION:
   Whispered Voice is clearly audible down to the spine of the third dorsal vertebra, below which there is a sharp break in intensity with loss of the articulate element.
   Bronchial/
Bronchial Breathing begins to lose its intensity and quality at the fourth dorsal spine and gradually diminishes to the seventh dorsal spine. There is no clear cut break.

Spoken Voice begins to diminish in intensity and quality from the fourth dorsal spine downwards to the seventh dorsal spine. There is no clear cut break.

EXPANSION OF THE LUNGS AT THE BASE:

Right: $1 \frac{1}{2}$ ins.

Left: 1 inch.

GLANDS:

The tonsillar gland on each side of the neck is just palpable. There is a small chain of tiny glands just palpable on both sides of the neck descending to just above the clavicle.
ROBERT MARSHALL AGED 11.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:
The ribs are equally spaced on both sides.

HEART:
The shadow of the heart is placed more centrally than usual, giving the appearance as if the right side were enlarged.

LUNGS, BRONCHI AND MEDIASTINUM:
The root of the right lung is small and ill defined, being clear from the right border of the heart. It passes imperceptibly into the branching shadows to the apex, base and mid zone of the lung, these shadows not being clearly defined. No opaque areas are visible.

The root of the left lung is not clearly defined and passes into indefinite branching shadows to the apex, mid zone and base of the lung. Two tiny opaque dots are visible in the root shadow, and there is a small annular shadow over the inner aspect of the fifth rib. The apices are obscured by the ribs and clavicle.
NAME: JAMES GRANT. AGED 13. CASE XXXII.

HOME: Edinburgh. Father dead, Mother insane.

HEIGHT: 4 ft. 5½ ins. DREYER’S TABLES.


STEM LENGTH: 27 ins. " " " = 1946 cc.

CHEST MEASUREMENTS:

Easy Respiration: 26½ ins. " " = 2256 cc.

FullInspiration: 28½ ins.

FullExpiration: 26 ins.

VITAL CAPACITY: 1.61 litres.

PIRQUET SKIN TEST:

Human: Negative.

Bovine: Negative.

PHYSICAL EXAMINATION:

Prominent Veins on upper aspect of chest wall are present in minor degree.

Vaso-motor Paralysis: Negative.

Myotatic Irritability: Negative.

LUNGS:

There is an impaired percussion note at the left apex posteriorly, with faint vesicular breathing. Below this region, in the left inter-scapular region, the percussion note is slightly impaired. At the right apex anteriorly, the percussion note is slightly impaired with rather harsh vesicular breathing.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible, down to the spine of the second dorsal vertebra, below which there/
there is a sharp break in intensity, with loss of the articulate element.

*Bronchial Breathing* is clearly audible, down to the spine of the second dorsal vertebra, below which there is a sudden change in quality and diminution in intensity.

*Spoken Voice* is clearly audible to the second dorsal spine, where there is a sharp break in the quality and intensity.

**EXPANSION of the LUNGS at the BASE:**

- Right: $1\frac{1}{4}$ ins.
- Left: $1\frac{1}{2}$ ins.

**GLANDS:**

There are no well defined small glands. There is, however, on both sides, a chain of tiny, lymph nodes, which are just palpable.
RIBS: -

The Ribs are equally spaced on both sides.

HEART: -

The Heart shadow is of average size and is of the globular type.

LUNGS, BRONCHI and MEDIASTINUM: -

The Root of the Right Lung shows an elongated shadow clearly differentiated from the right lateral border of the cardiac shadow. There are two or three well marked opaque dots at the upper extremity of this shadow, and a small annular shadow lateral to this region. Branching shadows are well seen to the periphery of the mid zone, and base, and to a less extent the apex of the Lung.

The Root of the Left Lung shows a small homogenous shadow with one or two small opaque dots. Branching towards the mid zone is shown by a general mottled appearance. Branching shadows towards the apex show some tiny opaque dots. There is a small annular shadow situated above the root shadow and at the edge of the Cardiac shadow.
GEORGE MACDONALD aged 9.  CASE XXXIII.
NAME: GEORGE MACDONALD AGED 9. CASE XXXIII.

HOME: Edinburgh. Father dead.

HEIGHT: 4 ft. 1 in. DREYER'S TABLES.

WEIGHT: 4 st. 7½ lbs. Class C. Vital Capacity = 2011

STEM LENGTH: 25½ ins. " " " = 1711

CHEST MEASUREMENTS:

Easy Respiration: 25½ ins. " = 2093

Full Inspiration: 27½ ins.

Full Expiration: 25½ ins.

VITAL CAPACITY: 1.60 litres.

PIRQUET SKIN TEST:

Human: Positive.

Bovine: Faintly positive.

PHYSICAL EXAMINATION:

Prominent Veins on upper part of chest are present in mild degree.

Vaso-motor Paralysis - positive, to a slight degree.

Myotatic Irritability - positive, with small myoidema on the left pectoral muscles.

HEART:

There is a short, soft, localised systolic murmur audible in the mitral area. No accentuation of the pulmonary second sound.

LUNGS:

The percussion note shows slight impairment at the left Apex, both anteriorly and posteriorly. In front, the impaired note approaches the second rib, and behind the spine of the scapula.

SPINAL/
SPINAL AUSCULTATION:

Whispered Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break from the articulate quality.

Bronchial Breathing is clearly audible to the spine of the third dorsal spine, below which a definite and clear change takes place abruptly to a vesicular and more distant type.

Spoken Voice is clearly audible to the third dorsal spine, below which a sharp change in intensity and quality takes place.

GLANDS:

The tonsillar glands on both sides are small, but just palpable. Descending from them a few tiny lymph nodes are palpable going downwards in chain like fashion toward the clavicle.
GEORGE MACDONALD. AGED 9 Years.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:-

The Ribs are equally placed on both sides.

HEART:-

The shadow of the heart is normally placed with slight increase of the shadow to the right side, suggesting dilatation.

LUNGS, BRONCHI and MEDIASTINUM:-

The Root of the Right Lung is elongated, but less dense than many. There are several well defined small opaque dots towards the upper and outer aspect of the root. Branching shadows from the root are present, but not very clear cut. Branching is ill defined in the mid zone of the lung.

The Root of the Left Lung is indistinct and ill defined passing imperceptibly to the branching shadows along the bronchial lines to the apex and base of the Lung. The mid zone is ill defined.

Two prints are given here to illustrate the differences in appearances with alteration in the "printing" technique.
JAMES GORDON aged 10.

CASE XXXIV.
NAME: JAMES GORDON aged 10. CASE XXXIV:


HEIGHT: 4 ft. 6½ ins. DREYER'S TABLES

WEIGHT: 4 st. 8 lbs. Class C. Vital Capacity = 2022 cc.

STEM LENGTH: 26½ ins. " " " " = 1826 cc.

CHEST MEASUREMENTS:

- Full Inspiration: 26 ins.
- Full Expiration: 23½ ins.

VITAL CAPACITY: 1.80 litres.

PIRQUET SKIN TEST:

- Human: Positive.
- Bovine: Positive.

PHYSICAL EXAMINATION:

- Prominent Veins on upper part of chest are present in mild degree.
- Vaso-motor Paralysis: present, and very definite.
- Myotatic Irritability: present, with myoidema on left side.

He has a "pink and white" appearance with rather a flat chest and increase of fine hair in the centre of his back.

Teeth have required considerable attention.

HEART:

- Pulmonary second sound is accentuated.

LUNGS:

- There is an impaired percussion note at the Left Apex both anteriorly and posteriorly. It is more marked/
marked behind and reaches to the spine of the scapula, while in front it is noticed above the clavicle only. In the posterior area, the vocal resonance is slightly increased, being equal to the right apex. The breath sounds at the left base are feebleer than those at the right.

**SPINAL AUSCULTATION:**

- **Whispered Voice** is clearly audible to the spine of the second dorsal vertebra, below which there is a sharp break from the articulate quality.
- **Bronchial Breathing** is well defined to the spine of the second dorsal vertebra, the break from bronchial to broncho-besicular below this, is definite, but not quite so clear cut as in the vocal observations.
- **Spoken Voice** is clearly audible to the spine of the second dorsal vertebra, below which there is a sharp change in quality and intensity.

**EXPANSION of the LUNGS at the BASE.**

- Right: $1\frac{1}{4}$ ins.
- Left: 1 in.

**GLANDS:**

A chain of tiny glands stretches from the region of the tonsilar gland to above the clavicle on both sides of the neck.
RIBS:
The ribs are equally spaced on both sides.

HEART:
The heart shadow is normally placed and of average size.

LUNGS, BRONCHI and MEDIASTINUM:

The Root of the Right Lung shows an ill defined elongated shadow in which there are two or three opaque dots. Above this area is a small ill defined annular shadow with some small clear areas in its periphery. The branchings shadows to the apex, mid zone and base of the lung are present, but not clearly defined.

The Root of the Left Lung is represented by a small ill defined hazy area in which there are small opaque dots from which branching shadows are seen towards the apex, mid zone and base of the lung. The scapular shadow obscures the periphery.
JOHN CUTHBERT aged 11.

CASE XXXV.
NAME: JOHN CUTHBERT. AGED 11. CASE XXXV.
HOME: Dundee. Father deaf and dumb.
HEIGHT: 4 ft. 4 ins. DREYER'S TABLES.
WEIGHT: 4 st. 8 lbs. Class C. Vital Capacity = 2022 cc.
STEM LENGTH: 26 ins. = 1787 cc.
CHEST MEASUREMENTS:
   Easy Respiration : 25½ INS. = 2093 cc.
   Full Inspiration : 27½ ins.
   Full Expiration : 25 ins.
VITAL CAPACITY: 1.40 litres.
PIRQUET SKIN TEST:
   Human: negative.
   Bovine: negative.
PHYSICAL EXAMINATION:
The chest formation is slightly 'rickety'.
There is some degree of nasal obstruction.
   Prominent veins on upper aspect of the chest are present in mild degree.
   Vaso-motor paralysis - positive.
   Myotatic Irritability - negative.
HEART:
   There is a slight degree of roughening of the first sound in the mitral area.
LUNGS:
   There is an impaired percussion note at the right apex posteriorly, and to a less extent, in the upper part of the right interscapular region. The breathing/
breathing at the right apex, posteriorly, is definitely bronchial in character. The percussion note over the left apex, above the clavicle, is slightly impaired.

SPINAL AUSCULTATION:

**Whispered voice** is clearly audible to the spine of the fourth dorsal vertebra, below which there is a clear cut break in intensity, with loss of the articulate element.

**Bronchial breathing** is clearly audible to the spine of the fourth dorsal vertebra, below which there is a break in quality and diminution in intensity, but not very clear cut.

**Spoken voice** is clearly audible to the spine of the fourth dorsal vertebra, below which there is a break, but not very abrupt in quality and intensity.

EXPANSION of the LUNGS at the BASES:

Right: 1½ ins.
Left: 1½ ins.

GLANDS:

There is a chain of tiny glands, hardly palpable, on each side of the cervical region. The tonsillar gland is not clearly palpable.
JOHN GUTHBERT AGED 11.

RADIOGRAM TAKEN IN FULL INSPIRATION.

RIBS:
The ribs are equally spaced on both sides.

HEART:
The shadow of the heart is normally placed, but tends to the globular type.

LUNGS, BRONCHI and MEDIASTINUM:
The root of the right lung is represented by the normal concentration of branching shadows from the apex, mid zone and base. It is clearly marked from the right cardiac shadow. There are two small annular shadows, with small opaque dots in them.

The root of the left lung is more clearly defined, and here are tiny opaque dots and annular shadows. The branching shadows to the apex, are perpendicular and fairly clear. Branching shadows to the mid zone and base are less clearly defined. The scapular shadows are very distinct along their vertebral borders.
LESLIE MUNRO aged 12.  CASE XXXVI.
NAME: LESLIE MUNRO  AGED 12.  CASE XXXVI.
HOME: Edinburgh.  Father dead.
HEIGHT: 5 ft. £ in.  DREYER'S TABLES.
WEIGHT: 4 St. 6½ lbs.  Class C.  Vital Capacity = 2034 cc.
STEM LENGTH: 31 ins.  "  "  "  " = 2658 cc.
CHEST MEASUREMENTS:
  Easy Respiration: 27 ins.  =2298 cc.
  Full Inspiration: 29½ ins.
  Full Expiration: 26½ ins.
VITAL CAPACITY: 2.50 litres.
PIRQUET SKIN TEST:
  Human: positive.
  Bovine: positive.
PHYSICAL EXAMINATION:
  Prominent veins on upper part of chest are present in moderate degree.
  Vaso-motor paralysis - negative.
  Myotatic Irritability - negative.
LUNGS:
  There is a slightly impaired percussion note below the right clavicle, as well as at the extreme apex of the left lung posteriorly. The breath sounds in the anterior area, are vesicular in type, but feeble than normal.
SPINAL AUSCULTATION:
  Whispered voice is clearly audible to the spine/
spine of the third dorsal vertebra, below which a sharp break takes place in intensity, with loss of the articulate element.

**Bronchial breathing** is clearly audible, down to the spine of the fourth dorsal vertebra, where a sharp change takes place in quality, with a corresponding diminution in intensity.

**Spoken voice** is audible down to the spine of the third dorsal vertebra, where a sharp break in quality and intensity takes place.

**EXPANSION of the LUNGS at BASE:**

- Right: $1\frac{1}{2}$ ins.
- Left: $1\frac{3}{4}$ ins.

**GLANDS:**

A few, tiny, lymph nodes are palpable, on the left side, in chain-like arrangement, from the tonsillar gland, which is just palpable. On the right side, a small, tonsillar gland is palpable, and one or two, very tiny nodes above the left clavicle.
LESLIE MUNRO AGED 12.
RADIOGRAM taken DURING FULL INSPIRATION.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The heart shadow is normally placed, and of average size, except for a slight dilatation to the right side.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung as a definite shadow, is almost non-existent, except for a small annular shadow, with three opaque dots in it, over the inner part of the seventh rib. There is a small opaque dot visible over the sixth rib, just above this annular shadow.

The root of the left lung is more nodular in appearance. An annular shadow is present in the upper part of the root, and several well defined, opaque areas are present. A definite shadow passes to the apex, tending inwards. The branching shadows, towards the mid zone and base of the lung, are poorly defined.
NAME: GEORGE MATHEWSON   AGED 10       CASE XXXVII.

HOME: Kilconquhar.  Father: killed war
      Mother: deaf and dumb.

HEIGHT: 4 ft. 2½ ins.  DREYER’S TABLES.

WEIGHT: 4 st. 9½ lbs. Class G. Vital Capacity = 2057 cc.

STEM LENGTH: 25½ ins. " " " = 1711 cc.

CHEST MEASUREMENTS:

  Easy Respiration: 26½ ins. " " = 2215 cc.
  Full Inspiration: 28 ins.
  Full Expiration: 25½ ins.

VITAL CAPACITY: 2.06 litres.

PIRQUET SKIN TEST:

  Human: markedly positive.
  Bovine: Positive.

PHYSICAL EXAMINATION:

  Prominent Veins in the upper part of the chest are
      present in minor degree.

  Vaso-motor paralysis: negative.

  Myotatic Irritability: negative.

LUNGS:

  The percussion note is impaired slightly at the
      apex of the right lung posteriorly.

SPINAL AUSCULTATION:

  Whispered Voice is clearly audible down to the
      spine of the second dorsal vertebra, below which a sharp
      break in intensity takes place with loss of articulate
      element.

  Bronchial/
Bronchial Breathing is audible down to the spine of the fourth vertebra below which there is a sharp change in quality and intensity.

Spoken Voice is audible down to the spine of the fourth vertebra below which it diminishes markedly in quality and intensity, but is not quite clear cut.

EXPANSION OF THE LUNGS AT THE BASE:

Right: $2\frac{1}{2}$ ins.
Left: $1\frac{1}{2}$ ins.

GLANDS:

Tonsillar glands are clearly palpable. Below these, on either side, there are two or three small glands tailing off into very tiny lymph nodes which are hardly palpable.
GEORGE MATHEWSON aged 10.
RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:
The ribs are equally spaced on both sides.

HEART:
The heart shadow is normally placed, and tends to the globular type.

LUNGS: BRONCHI and MEDIASTINUM:
The root of the right lung is represented by a tripartate opaque nodular appearance, which is clearly defined from the right cardiac shadow. Branching shadows to the apex and base of the lung are poorly defined. Branching shadows towards the mid zone are almost indistinguishable.

The root of the left lung is shown by a small dense area in which there are one or two small opaque dots. There is a faint perpendicular shadow going to the apex of the lung from the root. The periphery is obscured by the left scapular shadow. Towards the base of the lung the shadows are faintly defined.
IAN JAMIESON aged 10.

CASE XXXVIII.
NAME: IAN JAMIESON aged 10. CASE XXXVIII.

HOME: Edinburgh. Father dead.

HEIGHT: 4 ft. 5½ ins. DREYER'S TABLES.

WEIGHT: 4 st. 10 lbs. Class C. Vital Capacity = 2068 cc.

STEM LENGTH: 27½ ins. " " " " = 2029 cc.

CHEST MEASUREMENTS:


Full Inspiration: 27½ ins.

Full Expiration: 25 ins.

VITAL CAPACITY: 2.20 litres.

PIRQUET SKIN TEST:

Human: markedly positive.

Bovine: Positive.

PHYSICAL EXAMINATION:

Prominent Veins in upper part of the chest are present in mild degree.

Vaso-motor Paralysis: Positive.

Myotatic Irritability: Positive on left side.

Rather pale faced, but no conjunctival anaemia.

LUNGS:

There is an impaired percussion note at the left apex posteriorly, to the spine of the scapula. There is also an impaired percussion note at the right apex anteriorly to the second rib where the breathing is vesicular in type with prolonged expiration. The breath sounds at the left base are fainter than at the right.

SPINAL AUSCULTATION:

Whispered/
Whispered Voice is clearly audible down to the spine of the third dorsal vertebra, below which a sharp, clear cut diminution of intensity takes place, with loss of the articulate element.

Bronchial Breathing is clearly audible, down to the spine of the fourth dorsal vertebra, below which a sudden change to the vesicular type, with marked diminution in intensity takes place.

Spoken Voice is clearly audible, down to the second dorsal spine, below which it gradually fades, over the next two or three spines, there is no clear cut break in intensity and quality.

EXPANSION of the LUNGS at BASE:
   Right: 2½ ins.
   Left: 2 ins.

GLANDS:

There is a chain of tiny lymph nodes on either side of the neck, almost imperceptible to palpation.
RIBS:
The ribs are equally spaced on both sides.

HEART:
The shadow of the heart is normally situated and of average size.

LUNGS, BRONCHI and MEDIASTINUM:
The Root of the Right Lung is represented by a homogeneous, small, elongated shadow with a small opaque area at the upper extremity. It is separated from the cardiac shadow. The branching shadows towards the apex are well defined and show one small opaque dot. The branching shadows to the mid zone and base of the lung are ill defined.

The Root of the Left Lung is hazy and represented by a small annular shadow and several small opaque dots. Branching shadows to the apex are perpendicular and pass through several tiny opaque dots. The branching shadows to the mid zone and base of the lung are ill defined. The scapular shadow darkened the peripheral field.
WALTER JAMIESON aged 12.  CASE XXXIX.
NAME: WALTER JAMIESON AGED 12.  CASE XXXIX.
HOME: Edinburgh.  Father dead.
HEIGHT: 4 ft.4\(\frac{3}{4}\) ins.  DREYER'S TABLES.
WEIGHT: 4 st.10 lbs. Class C. Vital Capacity - 2068 cc.
STEM LENGTH: 27\(\frac{1}{2}\) ins.  "  "  "  - 1987 cc.
Easy Respiration: 26 ins.  - 2135 cc.
Full Inspiration: 27\(\frac{3}{4}\) ins.
Full Expiration: 25\(\frac{1}{4}\) ins.
VITAL CAPACITY: 1.80 litres.
PIRQUET SKIN TEST:
  Human: positive.
  Bovine: faintly positive.
PHYSICAL EXAMINATION:
  Prominent veins on upper aspect of chest are present to a mild degree on the right side.
  Vaso-motor paralysis: positive to a slight degree.
  Myotatic Irritability: negative.
PHYSICAL EXAMINATION:
  Some degree of general pallor, but no conjunctival anaemia. There are a few scars in front of left ear, and on the right frontal region, as if he had cut himself at some time. Tonsils enlarged. Increase of fine hair down central aspect of his back.
HEART:
  There is a well marked systolic murmur at the mitral area, also at the base of the heart.
LUNGS:
  There is an impaired note at the left apex posteriorly/
posteriorly, extending to the spine of the scapula. In this region, the breathing is bronchial in type. There is a very slight impairment of percussion note, in the upper part of the interscapular region of the right side.

**SPINAL AUSSCULTATION:**

*Whispered voice* is clearly audible to, at least, the fourth dorsal spine, but there is no clear cut break in intensity, and in the articulate element.

*Bronchial breathing* is clearly audible to the fourth dorsal spine, but there is no clear cut break in quality and intensity, below this.

*Spoken voice* follows the whispered voice, and tails off, below the fourth dorsal spine, but there is, again, no clear cut break in quality and intensity between two spines.

**EXPANSION of the LUNGS at the BASE:**

Right: $1\frac{1}{2}$ ins.

Left: $\frac{3}{4}$ in.

**GLANDS:**

The tonsillar gland in both sides is small, but palpable. Descending from it, as a fine chain, are tiny, lymph nodes, which are just palpable, and are present above the clavicles.
WAITER JAMIESON AGED 12.
RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:
The ribs on the left side show slight drooping in the apical region.

HEART:
The shadow of the heart is normally placed, but of a globular type, specially noticeable in the left lower aspect.

LUNGS, BRONCHI & MEDIASTINUM:
The root of the right lung is elongated and fairly dense. It is not well defined from the right border of the cardiac shadow in its upper and central portions. There are three well defined annular shadows, in series, one above the other, spreading out from the root region. There are also, several tiny, opaque areas in these circles: they are also present below, and to the outer aspect of the hilar region. Branching shadows towards the apex and base, are fairly clear, but not so, in the mid zone of the lung.

The root of the left lung shows some small opaque dots, in an annular form, situated in the rather indefinite root shadow. From this region, perpendicular, branching shadows are seen, towards the apex. Branching shadows towards the mid zone and base of the lung are indefinite.
ALEXANDER McBEATH aged 13. CASE XL.
NAME: ALEXANDER McBEATH AGED 13. CASE XL.
HOME: Penicuik. Father - dead, Mother - 'lost'.
HEIGHT: 4 ft. 5½ ins. DREYER'S TABLES.
STEM LENGTH: 27½ ins. " " " - 2029 "
CHEST MEASUREMENTS:
   Easy Respiration: 27 ins. - 2296 "
   Full Inspiration: 29½ ins.
   Full Expiration: 26 ins.
VITAL CAPACITY: 2.19 litres.
PIRQUET SKIN TEST:
   Human: negative.
   Bovine: negative.
PHYSICAL EXAMINATION:
   The Ziphisternum is prominent.
   Prominent veins in upper aspect of chest are present in minor degree just below the clavicles.
   Vaso-motor paralysis: negative.
   Myotatic Irritability: negative.
LUNGS:
   There is an impaired percussion note, over the left apex, posteriorly, and the left apex, below the clavicle. There is a slight degree of impairment of percussion note in the right interscapular region. The breath sounds are fainter than normal at both bases.
SPINAL AUSCULTATION:
   Whispered voice is clearly audible, down to the/
the spine of the fourth dorsal vertebra, below which there is a sharp break in intensity, with loss of the articulate element.

**Bronchial breathing** is clearly audible, down to the spine of the fourth dorsal vertebra, below which there is a sharp change in quality and diminution in intensity.

**Spoken Voice** is clearly audible to the fourth dorsal spine, but the change below this, is not so clear cut as in the previous phenomena.

**EXPANSION of the LUNGS at the BASE:**
- Right: $1\frac{3}{4}$ ins.
- Left: $1\frac{3}{4}$ ins.

**GLANDS:**

The right tonsillar gland is clearly palpable & descending from it, is a long chain of tiny lymph nodes, which are just palpable.

On the left side, there are several, tiny, scattered lymph nodes, chiefly behind the sternomastoid muscle. The tonsillar gland is not palpable.

There are a few, tiny lymph nodes, palpable in the right axillary region.
ALEX. McBEATH AGED 13.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The shadow of the heart is normally placed and of average size.

LUNGS, BRONCHI & MEDIASTINUM:

The root of the right lung shows an elongated denser shadow than usual, which is distinguishable from the right cardiac shadow at its centre. There are one or two opaque dots present, towards the outer aspect of this shadow. Branching shadows are well seen to the apex, midzone and base of the lung; a few tiny opaque dots are seen in relation to the apical branching.

The root of the left lung is rather denser, and more clearly defined than that on the right side, and shows several tiny opaque dots. Branching shadows to the apex, midzone and base of the lung are well defined. The branching to the apex is perpendicular, and several tiny, opaque dots are seen, with one annular shadow. There is also a small annular shadow towards the lower part of the root shadow.
CHRISTOPHER JENKINSON aged 11. CASE XLI.
NAME: CHRISTOPHER JENKINSON aged 11.  CASE XLI.
HOME: Edinburgh.  Father - dead.

HEIGHT: 4 ft. 6½ ins.  DREYER'S TABLES.
STEM LENGTH: 27¼ ins.  "  "  "  "  = 2029 cc.

CHEST MEASUREMENTS:

- Easy Respiration: 26 ins.  "  "  = 2133 cc.
- Full Inspiration: 27½ ins.
- Full Expiration: 24½ ins.

VITAL CAPACITY: 2.00 litres.

PIRQUET SKIN TEST:

- Human: Negative.
- Bovine: Negative.

PHYSICAL EXAMINATION:

- Prominent Veins in the upper part of the chest are present to a moderate degree.
- Vaso-motor paralysis: negative.
- Myotatic Irritability: positive, to a slight degree on the left side.

LUNGS:

- Clear.  Breath sounds are rather faint at both bases posteriorly.

SPINAL AUSCULTATION:

- Whispered Voice is clearly audible down to the spine.
spine of the fourth dorsal vertebra below which there is a sharp break in intensity and loss of the articulate element.

**Bronchial Breathing** is audible down to the spine of the third dorsal vertebra below which it gradually changes in quality and diminishes in intensity.

**Spoken Voice** is audible down to the seventh dorsal spine, but in gradually diminishing quality and intensity. There is no clear cut sharp break in this sound.

**EXPANSION OF THE LUNGS AT THE BASE:**
- Right: 1$\frac{3}{4}$ ins.
- Left: 1$\frac{1}{2}$ ins.

**GLANDS:**

The tonsillar gland is clearly palpable on the left side, and descending from it is a short chain of small glands which meet tiny glands above the clavicle. The tonsillar gland on the right side is only half the size, and descending from it there is a short chain of tiny lymph nodes which meet equally tiny nodes above the clavicle.
CHRISTOPHER JENKINS aged 11.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The heart shadow is normally placed, but is more globular in shape than usual.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung is small, but fairly well defined and clear of the right cardiac shadow. Above the upper part there is a well marked annular shadow with small opaque dots in it. There are two opaque dots lying lateral to it. Branching shadows to the apex are well defined, passing through the area of opaque shadows. The branching shadows to the base are ill defined and the mid zone of the lung is slightly darkened by the shadow of the scapula.

The root of the left lung is poorly defined, but contains one annular shadow, and above it are small opaque dots stretching towards the apex. Branching shadows towards the base and mid zone of the lung are not well defined.

Two prints are inserted here, to show differences produced by alterations in printing technique alone.
THOMAS MARSHALL aged 12.  CASE XLII.
NAME: THOMAS MARSHALL AGED 12. CASE XLII.

HOME: Edinburgh. Father alive - Mother alive.

HEIGHT: 4 ft. 5 ins. DREYER'S TABLES.

WEIGHT: 5 st. 1 lb. Class C. Vital Capacity = 2179 cc.

STEM LENGTH: 27\(\frac{1}{4}\) ins. " " " = 1987 cc.

CHEST MEASUREMENTS:

- Easy Respiration: 26\(\frac{1}{2}\) ins. = 2215 cc.
- Full Inspiration: 28\(\frac{3}{4}\) ins.
- Full Expiration: 25\(\frac{1}{2}\) ins.

VITAL CAPACITY: 2.10 litres.

PIRQUET SKIN TEST:

- Human: negative.
- Bovine: negative.

PHYSICAL EXAMINATION:

- Prominent veins on the upper aspect of the chest, are just perceptible on the right side.
- Vaso-motor paralysis: negative.
- Myotatic Irritability: negative.

The centre of the back shows an excess of fine hair.

LUNGS:

There is a slightly impaired note below the clavicle on the right side. In the left interscapular region, there is a slightly impaired percussion note.

Whispered voice is clearly audible to the spine of the fourth dorsal vertebra, below which there is a sharp break in intensity, with loss of the articulate element.

Bronchial/
Bronchial breathing is clearly audible to the spine of the fourth dorsal vertebra, below which there is a marked change in the quality and diminution in intensity.

Spoken voice is clearly audible to the spine of the fourth dorsal vertebra, below which there is a sharp change in quality and intensity of the sound.

EXPANSION of the LUNGS at the BASES:

Right: $2\frac{1}{2}$ ins.
Left: 2 ins.

GLANDS:

The tonsillar gland on the right side is clearly palpable, and, descending from it, is a chain of tiny cervical nodes, which are hardly perceptible.

On the left side of the neck, the tonsillar gland is just palpable, and descending from it, is a chain of tiny cervical nodes, hardly perceptible to palpation.
THOMAS MARSHALL AGED 12.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The heart shadow is normally situated, but of the globular type, giving the appearance of dilatation.

LUNGS, BRONCHI & MEDIASTINUM:

The root of the right lung is well defined, and almost indistinguishable from the right cardiac border. The branching shadows from the hilus, are well defined towards the apex and mid zone, but less clear towards the base of the lung.

The root of the left lung is well defined and denser than usual. There are several small opaque dots towards the periphery of this region. Branching shadows, towards the apex of the lung, are seen to be perpendicular, or even bent, medially. Branching shadows to the mid zone and base of the lung, follow the normal bronchial lines. The increased density of the bronchial branching gives the impression of hyper-illumination at the bases.

Two prints are inserted here to show different appearances which may be obtained by slight alterations in printing technique.
NAME: JAMES MATHEWSON AGED 13. CASE XLIII.

HOME: Kinross. Father killed in the War. Mother - deaf and dumb.

HEIGHT: 4 ft. 8½ ins. DREYER'S TABLES.

WEIGHT: 5 st. 1½ lbs. Class C. Vital Capacity = 2190 cc

STEM LENGTH: 27½ ins. = 2029 cc.

CHEST MEASUREMENTS:

Easy Respiration: 27 ins. = 2298 cc.

Full Inspiration: 28½ ins.

Full Expiration: 26½ ins.

VITAL CAPACITY: 2.00 litres.

PIRQUET SKIN TEST:

Human: negative

Bovine: negative.

PHYSICAL EXAMINATION:

Prominent veins on upper aspect of chest wall are present in mild degree.

Vaso-motor paralysis: positive.

Myotatic Irritability: negative.

LUNGS:

There is an impaired percussion note at the left apex, posteriorly, and below the left clavicle to the second rib. There is also an impaired percussion note in the right interscapular region.

Whispered voice is clearly audible, down to the spine of the first dorsal vertebra, below which there is a sharp diminution in intensity, with loss of the articulate element.

Bronchial/
Bronchial breathing is clearly audible down to the spine of the seventh cervical vertebra, below which it gradually passes into the vesicular element, there being no sharp change.

Spoken voice is clearly audible, down to the spine of the 7th cervical vertebra, below which it fades off in intensity, gradually.

EXPANSION of the LUNGS at the BASE:

Right: \(1\frac{1}{4}\) ins.

Left: \(\frac{3}{4}\) in.

GLANDS:

The tonsillar glands are small, but quite clearly palpable. There is a small chain of tiny lymph nodes on each side, descending from these glands and a few tiny nodes above the clavicles on both sides.
RIBS:

There is a slight tendency for the ribs to droop on the left side.

HEART:

The shadow of the heart is normally placed and of average size.

LUNGS, BRONCHI & MEDIASTINUM:

The root of the right lung is not dense and is easily distinguished from the right cardiac shadow. There are, however, several well marked, small and tiny, opaque areas, which give the root shadow a slightly tripartite appearance. The upper nodular area is annular in shape. Branching shadows to the apex and mid zone are faint, but they show up better towards the base of the lung.

The root of the left lung does not exist as a well defined shadow, but there are several small, opaque dots at the root region, one set being in annular arrangement. There is a faint, annular shadow above this, situated medially, and another, below the root area. Well defined branching shadows are seen in the apex, and to a lesser degree, in the mid zone and base of the lung. This corresponds to the impaired note at the left apex.

Two radiogram prints have been inserted here to show difference in shadows with only a slight alteration in printing technique.
JOHN CAMPBELL aged 11. CASE XLIV.
NAME: JOHN CAMPBELL  AGED 11.  CASE XLIV.

HOME: Renfrew.  Father lost.

HEIGHT:  4 ft.  5\(\frac{1}{2}\) ins.  

DREYER’S TABLES.

WEIGHT:  5 st.  3\(\frac{1}{2}\) lbs.  Class C.  Vital Capacity =  2234 cc.

STEM LENGTH:  28 ins.  "  "  "  "  =  2113 cc.

CHEST MEASUREMENTS:

   Easy Respiration:  25\(\frac{1}{2}\) ins.  "  "  =  2053 cc.
   Full Inspiration:  28 ins.
   Full Expiration:  24\(\frac{3}{4}\) ins.

VITAL CAPACITY:  2.05 litres.

PIRQUET SKIN TEST:

   Human:  positive.
   Bovine:  positive.

PHYSICAL EXAMINATION:

   Prominent Veins on upper part of chest are present in mild degree.
   Vaso-motor paralysis:  negative.
   Myotatic Irritability:  negative.

LUNGS:

   There is an impaired note at the right apical region in front to the second rib and in this area the breathing is harsh with prolonged expiration.

SPINAL AUSCULTATION:

   Whispered Voice is clearly audible to the spine of the/
the third dorsal vertebra, below which a sharp change in intensity with loss of the articulate element takes place.

**Bronchial Breathing** is clearly audible to the spine of the third dorsal vertebra, below which there is an abrupt change in quality and diminution in intensity.

**Spoken Voice** is clearly audible to the third dorsal spine, below which there is a definite break in clearness, although not quite so marked as with the other two phenomena.

**EXPANSION OF LUNGS AT THE BASES:**

- Right: 1$\frac{1}{2}$ ins.
- Left: 1$\frac{1}{2}$ ins.

**GLANDS:**

The tonsillar glands are just clearly palpable on each side of the neck. Below these glands chains of tiny cervical nodes can just be made out running down to the clavicles on each side.
JOHN CAMPBELL AGED 11.

RADIOGRAM taken DURING FULL INSPIRATION.

N.B. The plate is a little over exposed and therefore lacks clear definition.

RIBS:

There is equal spacing of the ribs on both sides.

HEART:

The heart shadow is normally situated and of average size.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung is fairly extensive, but ill defined and thin. It merges into the right border of the heart shadow, from which it can just be defined by the difference in densities. Branching shadows towards the inner aspect of the base of the lung are well defined. Towards the apex of the lung, the branching shadows are less defined, and still less so, to the mid zone of the lung.

The root of the left lung is also fairly extensive, but ill defined. There are one or two opaque dots towards the periphery of the root shadow. Branching shadows arise perpendicularly, from the upper extremity of the hilus region. Branching shadows towards the base are ill defined. The scapula gives an indefinite shadow in the peripheral aspect of the mid zone.
JAMES MUNRO aged 11.  
CASE XLV.
NAME: JAMES MUNRO. AGED 11. CASE XLV.

HOME: Aberdeen. Father & Mother Deaf and Dumb.

HEIGHT: 4 ft. 4½ ins. DREYER'S TABLES.

WEIGHT: 5 st. 4½ lbs. Class C. Vital Capacity = 2256 cc.

STEM LENGTH: 27 ins. " " " = 1946 cc.

CHEST MEASUREMENTS:
- Easy Respiration: 27 ins. " " " = 2298 cc.
- Full Inspiration: 30 ins.
- Full Expiration: 26 ins.

VITAL CAPACITY: 2.30 litres.

PIRQUET SKIN TEST:
- Human: negative.
- Bovine: negative.

PHYSICAL EXAMINATION:
- Prominent Veins on upper part of the chest are absent.
- Vaso-motor Paralysis is present to a slight degree.
- Myotatic Irritability is present on the left side, to a slight degree.

There is a very slight degree of "pigeon breast" appearance. The tonsils are much enlarged on both sides. There is a mild degree of nasal catarrh.

LUNGS:
- There is a slightly impaired percussion note at the extreme right and left apex posteriorly.

SPINAL AUSCULTATION:
- Whispered/
Whispered Voice is clearly audible to the spine of the second dorsal vertebra, below which there is a sharp break in intensity with loss of the articulate element.

Bronchial Breathing is clearly audible to the third dorsal spine, below which the quality and intensity of the sound gradually diminish to the fifth dorsal spine. There is no clear cut break.

Spoken Voice is audible to the spine of the third dorsal vertebra, below which there is a gradual diminution in intensity and change of quality to the fifth dorsal spine. There is no clear cut break.

EXPANSION OF THE LUNGS AT THE BASES:

Right; 1\(\frac{3}{4}\) ins.

Left: 1\(\frac{1}{4}\) ins.

GLANDS:

A small tonsillar gland is palpable at each side of the neck, and below this there is a chain of tiny lymph nodes, hardly palpable, extending down to the clavicle and of equal size on both sides.
JAMES MUNRO AGED 11.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

N.B. The whole of the photograph is not included.

RIBS:

There is very slight drooping of the ribs on the left side.

HEART:

The heart shadow is displaced slightly to the left side, but is of average size.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung is indistinguishable from the right cardiac shadow at its central point. From this region, it descends clear of the heart shadow, and passes gradually into the basal branching shadow, following the bronchial lines. The upper part of the root is not clearly defined, and faint, branching shadows pass towards the apex of the lung. Branching shadows in the mid zone of the lung, are not well defined.

The root of the left lung shows many small opaque areas, but no well defined density otherwise. The branching shadows to the apex of the lung, are well defined. Small opaque dots are seen in this area, with an annular arrangement. No branching shadows to the left base of the lung are visible.
NAME: ALEXANDER McCREAM aged 14. CASE XLVI.

HOME: Fife. Father and Mother both deaf and dumb.

HEIGHT: 4 ft. 6½ ins. DRAYER'S TABLES.

WEIGHT: 5 st. 4½ lbs. Class C. Vital Capacity = 2256 cc.

STEM LENGTH: 20½ ins. " " " = 2199 cc.

CHEST MEASUREMENTS:

  Full Inspiration: 27½ ins.
  Full Expiration: 24½ ins.

VITAL CAPACITY: 2.30 litres.

PIRQUET SKIN TEST:

Human: Negative.

Bovine: Negative.

PHYSICAL EXAMINATION:

Prominent Veins in upper part of chest wall are present in mild degree.

Vaso-motor Paralysis: Negative.

Myotatic Irritability: Negative.

LUNGS:

There is a very slight impairment of percussion note at the right apex posteriorly.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break in intensity with loss of the articulate element.

Bronchial Breathing is clearly audible to the spine of the third dorsal vertebra, below which the quality/
quality changes abruptly with corresponding loss of intensity.

*Spoken Voice* is clearly audible to the spine of the third dorsal vertebra, below which the quality and intensity gradually diminishes over the next three spines and then fades off.

**EXPANSION OF THE LUNGS AT THE BASES:**

- Right: - = 2ins.
- Left: - = 2ins.

**GLANDS:**

The tonsillar glands on both sides of the neck are clearly palpable. Below them are a few tiny cervical nodes which are scarcely palpable.
ALEXANDER McCREDY. AGED 14 Years.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:

The Ribs are equally spaced on both sides.

HEART:

The shadow of the Heart is normally situated and of average size.

LUNGS, BRONCHI and MEDIASTINUM;

The Root of the Right Lung is ill defined by an indefinite shadow clearly distinguishable from the right cardiac shadow except at its centre, where there is an opaque area. Two spaces above this dark area there is a tiny opaque dot. Branching shadows to the apex, mid zone and base of the Lung are clearly defined.

The Root of the Left Lung has a hazy and indefinite outline, with however three well marked opaque dots at its centre and two tiny opaque dots above this area situated in the lower aspect of a small annular shadow at the edge of the cardiac shadow. Branching shadows to the apex and mid zone of the Lung are fairly well defined, but indistinguishable towards the base.

Two prints accompany this case record to illustrate the difference in appearance due entirely to slight variations of photographic technique in taking the "positive" from the same "negative".
ROBERT NICOLL aged 13.  CASE XLVII.
NAME: ROBERT NICOLL AGED 13. CASE XLVII.
HOME: Glasgow. Father and Mother alive.
HEIGHT: 4 ft. 5½ ins. DREYER'S TABLES.
WEIGHT: 5 st. 5½ lbs. Class C. Vital Capacity = 2284 cc.
STEM LENGTH: 28½ ins. " " " = 2199 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 26 ins. " " = 2133 cc.
   Full Inspiration: 28½ ins.
   Full Expiration: 25½ inst.
VITAL CAPACITY: 1.95 litres.
PIRQUET SKIN TEST:
   Human: Positive.
   Bovine: Negative.
PHYSICAL EXAMINATION:
   Prominent Veins on upper part of chest are absent.
   Vaso-motor Paralysis: Negative.
   Myotatic Irritability: Negative.
HEART:
   A slight systolic murmur and reduplicated first sound in the mitral area are audible, also slight accentuation of the pulmonary second sound at the Pulmonary area.
LUNGS:
   There is a slightly impaired percussion note at the apex of the right lung, in front, above the clavicle/
clavicle. On the right side posteriorly, there is an impaired percussion note, which is also noticeable, but less distinct, in the right interscapular area.

SPINAL AUSCULTATION:

**Whispered Voice** is clearly audible to the spine of the fourth dorsal vertebra, below which there is a sharp break in intensity, with loss of the articulate element.

**Bronchial Breathing** is clearly audible to the spine of the fourth dorsal vertebra, below which there is a sharp break in quality, and diminution of intensity.

**Spoken Voice** is clearly audible to the spine of the fourth dorsal vertebra, below which there is a sharp change in quality and intensity.

**EXPANSION** of the LUNGS at BASE:

- **Right:** 1\(\frac{1}{2}\) ins.
- **Left:** 1\(\frac{3}{4}\) ins.

**GLANDS:**

Very small, tonsillar glands are just palpable, and tiny glands are just palpable below these, but do not stretch below the cricoid cartilage on the right side. There are one or two small glands above the left clavicle.
ROBERT NICOL. AGED: - 13 Years.

RADIGRAM TAKEN DURING FULL INSPIRATION.

RIBS:

The Ribs are equally spaced on both sides.

HEART:

The Heart shadow is normally placed, being slightly globular in type.

LUNGS, BRONCHI and MEDIASTINUM:

The Root of the Right Lung is ill defined, there being an annular shadow lying over the sixth rib, connected with a slightly denser shadow below. There are one or two opaque dots visible over the sixth and seventh ribs in this region. The fan-like branching to apex, mid zone and base of the Lung is clearly seen.

The Root of the Left Lung is not dense, but is more clearly defined in one area opposite the sixth rib. There are at least two opaque dots visible. The fan-like branching spreading from the root to the apex, mid zone and base of the Lung is of much the same character as the other side. The appearance of extra translucency at the bases is not obvious in the negative. The apices of the Lungs are not clear due to the overlapping of the first and second ribs with the clavicle.

Two photographs are given here to illustrate differences in appearance which are only due to photographic technique.
DAVID FRASER aged 11.

CASE XLVIII.
NAME: DAVID FRASER. AGED 11. CASE XLVIII.

HOME: Edinburgh. Father dead.

HEIGHT: 4 ft. 5½ ins. DREYER'S TABLES.

WEIGHT: 5 st. 6 lbs. Class C. Vital Capacity = 2289 cc.

STEM LENGTH: 26½ ins. " " " = 2199 cc.

CHEST MEASUREMENTS:

Easy Respiration: 27 ins. " " = 2298 cc.

Full Inspiration: 26½ ins.

Full Expiration: 26 ins.

VITAL CAPACITY: 2.19 litres.

PIRQUET SKIN TEST:

Human: negative.

Bovine: negative.

PHYSICAL EXAMINATION:

Prominent Veins on the upper part of the chest wall are just apparent.

Vaso-motor paralysis: negative.

Myotatic Irritability: negative.

There is some degree of nasal catarrh and the tonsils are enlarged.

LUNGS:

There is an impaired percussion note at the right apex anteriorly down to the second rib. Posteriorly, at the extreme right apex there is a faintly impaired percussion note. The breath sounds towards both bases are/
are feebler than normal.

**SPINAL AUSCULTATION:**

*Whispered Voice* is audible to the spine of the second dorsal vertebra, below which there is a sharp break in intensity, with loss of articulate element.

*Bronchial Breathing* is clearly audible to the spine of the second dorsal vertebra, below which there is a gradual change in quality and diminution in intensity. There is no clear cut break.

*Spoken Voice* is clearly audible to the spine of the second dorsal vertebra, below which there is a gradual change in quality and loss of intensity.

**EXPANSION OF THE LUNGS AT THE BASES:**

Right: $1\frac{1}{2}$ ins.

Left: 1 inch.

**GLANDS:**

The tonsillar gland on the right side is well defined and below it, is a small chain of palpable glands. The left tonsillar gland is just palpable and below it, is a chain of tiny lymph nodes which are just palpable.
DAVID FRASER AGED 11.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:
The ribs on the right upper part of the chest show more drooping than those on the left side.

HEART:
The heart shadow is normally situated, but of the globular type indicating slight dilatation.

LUNGS, BRONCHI AND MEDIASTINUM:
The root of the right lung is less dense than several others, but is clearly defined from the right cardiac shadow. There is a small annular area at the upper part of the root with two or three tiny opaque dots visible in it. The fan-like branching shadow to the apex, mid zone and base of the lung is faintly present along the lines of the bronchi.

The root of the left lung is more homogeneous, but less dense than the right lung. One large, and one tiny annular shadow is clearly visible, the latter lying over a rib and being denser than the former, which lies below and lateral to the tiny circle. There are one or two tiny opaque dots visible towards the periphery of the root region. The branching shadows to the apex and base of the lung are well defined.

Two prints are given to illustrate differences in appearance, as a result of photographic technique in producing 'positive' from the same 'negative.'
THOMAS HORN aged 13.  CASE XLIX.
NAME: THOMAS HORN  AGED 13.  CASE XLIX.

HOME: Aberdeen  Father killed - Mother 'lost'.

HEIGHT: 4 ft. 6 ins.  DREYER'S TABLES.

WEIGHT: 5 st. 7 lbs. Class C. Vital Capacity = 2310 cc.

STEM LENGTH: 28 ins.  = 2113 cc.

CHEST MEASUREMENTS:

Easy Inspiration: 25½ ins.  = 2073 cc.

Full Inspiration: 29 ins.

FullExpiration: 25 ins.

VITAL CAPACITY: 2.60 litres.

PIRQUET SKIN TEST:

Human: positive.

Bovine: positive.

PHYSICAL EXAMINATION:

Prominent veins in upper aspect of chest are present to a minor degree on the left side.

Vaso-motor Paralysis: negative.

Myotatic Irritability - positive, with slight myoidema over the left pectoral muscle.

LUNGS:

The percussion note at the left apex posteriorly, is impaired, also at the left apex, below the clavicle to the second rib. The right interscapular region shows a slight degree of impairment of percussion note. The breath sounds at the left apex in front, are broncho-vesicular in type.

SPINAL/
Whispered Voice is clearly audible to the spine of the first dorsal vertebra, below which there is a sharp diminution in intensity and loss of the articulate element.

Bronchial Breathing is also clearly audible to the spine of the first dorsal vertebra, below which there is a sharp change in quality, and diminution of intensity.

Spoken Voice is clearly audible to the spine of the first dorsal vertebra, below which it diminishes in intensity, and change of quality takes place, there being no clear cut demarcation.

EXPANSION of the LUNGS at the BASE:

    Right: 2 1/2 ins.

    Left: 2 ins.

GLANDS:

The tonsillar glands are both just palpable, and a few tiny cervical nodes are palpable below the left tonsilar gland. There are none palpable on the left side.
THOMAS HORN AGED 13.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

N.B. "Pin-holed" plate.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The shadow of the heart is displaced slightly to the left side, and is of the atrophic type.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung is elongated, but not clearly defined, although it is quite clearly defined from the right cardiac border.

There are several opaque dots in this darkened area, which at the centre, are arranged in an annular shadow. There are three small, clear, circular areas, above and lateral to, the centre of the hilus.

The branching shadows to the apex, mid zone, and base of the lung, are fairly well defined.

The root of the left lung shows a small, hazy central area, in which there are one or two tiny opaque dots. Branching shadows from this region to the apex, are almost perpendicular, and well marked. The branching shadows to the base are distinct, but less so, to the mid zone of the lung.
DAVID SMITH aged 12. CASE I.
NAME: DAVID SMITH. AGED 12. CASE L.

HOME: Wormit. Father alive, but deaf & dumb.

HEIGHT: 4 ft. 7½ ins. DREYER’S TABLES.

WEIGHT: 5 st. 7½ lbs. Class C. Vital Capacity = 2320cc.

STEM LENGTH: 28½ ins. " " " " = 2199 "

CHEST MEASUREMENTS:
- Easy Respiration: 26½ ins. = 2174 "
- Full Inspiration: 28½ ins.
- Full Expiration: 25½ ins.

VITAL CAPACITY: 1.75 litres,

PIRQUET SKIN TEST:
- Human: positive.
- Bovine: negative.

PHYSICAL EXAMINATION:
- Prominent veins in upper part of chest are present in mild degree.
- Vaso-motor paralysis: negative.
- Myotatic Irritability: negative.
- The tonsils are enlarged.

LUNGS:
- There is an impaired percussion note at the right apical region, in front, below the clavicle to the second rib. At this spot - where the rib joins the cartilage - there is a curious crack-like sound on breathing, due to a looseness of attachment of the rib to cartilage.
- At the right apex, posteriorly, the percussion note is impaired, to the spine of the scapula.

The/
The breathing in this region is pronounced broncho-
vesicular in type.

**SPINAL AUSCULTATION:**

*Whispered voice* is audible over the first four dorsal spines, in gradually diminishing intensity, but there is no clear cut break in intensity, or in the articulate element.

*Bronchial breathing* shows the same phenomena of gradual diminution in quality and intensity, over the first four dorsal spines, without any clear cut break.

*Spoken voice* shows the same phenomena of gradual diminishing intensity, and change in quality, over the first four dorsal spines.

**EXPANSION of LUNGS at BASES:**

Right: 1 in.
Left: 1 in.

**GLANDS:**

*Right cervical glands* show a well marked, considerably swollen, tonsillar gland, and from this downwards, the glands diminish rapidly in size, till they are quite tiny, above the clavicle.

*Left cervical glands* show a tonsillar gland, quite well defined, but only about half the size of that on the right side. Below this, the chain is smaller and rapidly becomes composed of tiny lymph nodes.
RADIOGRAM TAKEN DURING FULL INSPIRATION.

N.B. The whole Thorax is not included on this plate.

RIBS:

The ribs of the right side of the chest are more closely placed than those on the left side.

HEART:

The shadow of the heart is centrally placed, and of average size, but slightly atrophic in type.

LUNGS, BRONCHI & MEDIASTINUM:

The root of the right lung shows an elongated shadow, which is not unduly dense, but merges into the cardiac shadow. In the fourth space, below the right clavicle, there is a small, dark, opaque, dotted area, with a small, faint ring-like shadow, one centimeter, peripheral to it, in the same space with tiny, opaque dots at each extremity. It will be noted that the impaired percussion note at the right apex, compares with the darker appearance of the right apex, on the X-ray.

Branching to the apex, mid zone and base of the lung is clear, and follows the bronchial lines.

The root of the left lung is diffuse and clearly visible beyond the heart shadow, the shadow being deepest in the fourth space below the clavicle. There are several fine, opaque dots visible in an interspace, and the one above it.

Branching shadows to the apex and base are clearly/
clearly seen. The scapular shadow, to some extent, obscures the mid zone towards the periphery.
NAME: NORMAN DUNCAN  aged 9  CASE LI.
HOME: Leith.  Father dead.

HEIGHT: 4 ft. 7 ins.  DREYER'S TABLES.

WEIGHT: 5 st. 8 lbs.  Class C. Vital Capacity = 2332 cc.

STEM LENGTH: 28½ ins.  "  "  "  = 2199 cc.

CHEST MEASUREMENTS:

Easy Respiration: 26 ins.  "  "  = 2133 cc.

Full Inspiration: 28½ ins.

Full Expiration: 26 ins.

VITAL CAPACITY: 2.10 litres.

PIRQUET SKIN TEST:

Human: positive

Bovine: negative.

PHYSICAL EXAMINATION:

Prominent Veins in upper part of chest are present in mild degree.

Vaso-motor paralysis: present to slight degree on left side.

Myotatic Irritability: present, myoidema on the left side.

LUNGS:

There is a slightly impaired note below the right clavicle to the second rib. The left interscapular region shows a slight impairment of percussion note.

SPINAL AUSCULTATION:

Whispered/
Whispered Voice is clearly audible to the spine of the second dorsal vertebra, below which a clear break from the articulate quality is present.

Bronchial Breathing is audible to the second dorsal spine, below which there is a gradual diminution of intensity to the sixth or seventh dorsal spine. There is no clear cut break from the bronchial to the vesicular element.

Spoken Voice is clearly audible to the second dorsal spine, and then gradually tails off to about the fifth dorsal spine, but shows no clear cut distinction at any particular spine.

EXPANSION OF THE LUNGS AT THE BASES:

Right: 2 ins.
Left: 1 3/4 ins.

GLANDS:

The tonsillar glands are clearly palpable on both sides of the neck. From them descend a chain of tiny lymph nodes on each side as far as the clavicles.
RADIOGRAM TAKEN DURING FULL INSPIRATION.

N. B. The boy has moved slightly giving rise to a blurred photograph.

RIBS:

The ribs are equally spaced on both sides.

HEART:

The heart is normally placed, but of a globular type, suggesting dilatation.

LUNGS, BRONCHI AND MEDIASTINUM:

The root of the right lung is elongated, clearly defined, but not dense, and is quite separate from the right cardiac shadow. A few tiny opaque dots, arranged in annular form, are visible towards the upper part of the root shadow. Branching shadows are faintly seen from the root to the apex, mid zone and base.

The root of the left lung is faint with a dark centre. It is distinguished from the left cardiac border by the differences in density. From this area perpendicular shadows pass to the apex of the lung. Two tiny opaque dots are visible in these shadows. No branching shadows are seen passing to the base of the lung.

This is the CASE which forms No. I. in Vol. I. The boy was 3 years younger when this radiogram was taken.
NAME: WILLIAM DUNBAR. AGED 11. CASE LII.

HOME: Edinburgh. PARENTS - Father dead.

HEIGHT: 4 ft. 7 ins. DREYER'S TABLES.

WEIGHT: 5 st. 9 lbs. Class C. Vital Capacity = 2354 cc.

STEM LENGTH: 27 ins. " " " " = 1946 cc.

CHEST MEASUREMENTS:

Easy Respiration: 27½ ins. " = 2582 cc.

Full Inspiration: 30 ins.

Full Expiration: 26½ ins.

VITAL CAPACITY: 2.55 litres.

PIRQUET SKIN TEST:

Human: positive.

Bovine: positive.

PHYSICAL EXAMINATION:

Prominent Veins on the upper aspect of chest are present to a minor degree, on the right side.

Vaso-motor Paralysis: positive.

Myotatic Irritability: positive.

LUNGS:

At the left apex posteriorly, there is an impaired percussion note. At the right apex anteriorly, there is an impaired percussion note below the right clavicle, the breathing at this point is vesiculobronchial in type. Over the third rib there is an impaired note in the mid-clavicular line, with vesiculo-bronchi- al breathing.
SPINAL AUSCULTATION:

Whispered Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break in intensity, with loss of the articulat e element.

Bronchial Breathing is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp change in quality and diminution in intensity.

Spoken Voice is clearly audible to the spine of the third dorsal vertebra, below which there is a sudden change in quality and diminution in intensity.

EXPANSION of the LUNGS at the BASE:

Right: 2½ ins.

Left: 1½ ins.

GLANDS:

A few tiny cervical lymph nodes are just palpable on both sides of the neck. The tonsillar gland on either side is not clearly palpable.
RIBS:

The Ribs are equally spaced on both sides.

HEART:

The shadow of the heart is normally placed, with a slight enlargement in the lower part of the right border.

LUNGS, BRONCHI and MEDIASTINUM:

The Root of the right Lung shows as a slightly kidney-shaped area, with two or three small opaque dots, visible in its medial surface. It is clearly defined from the right border of the cardiac shadow. Branching shadows, of rather a mottled appearance, take origin from this area to the apex, mid zone and base of the lung. There is a faint annular shadow 2 cm. below the right clavicle.

The Root of the left Lung is represented by a group of small opaque dots, fusing above, with a rather, large, annular shadow, in which there are tiny opaque dots. Branching shadows to the apex, mid zone, and base of the lung are ill defined and of rather a 'woolly' appearance.
NAME: ALEXANDER McDONALD AGED 12.           CASE LIII.
HOME: Edinburgh.         Father dead.
HEIGHT: 4 ft. 7½ ins.    DREYER'S TABLES.
WEIGHT: 5 st.10 lbs. Class C. Vital Capacity = 2375 cc.
STEM LENGTH: 29 ins. " " " " = 2287 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 26½ ins.        = 2215 cc.
   Full Inspiration: 29 ins.
   Full Expiration: 26 ins.
VITAL CAPACITY: 2.20 litres.
PIRQUET SKIN TEST:
   Human: negative.
   Bovine: negative.
PHYSICAL EXAMINATION:
   Prominent veins on upper aspect of chest wall are absent.
   Vaso-motor paralysis: positive.
   Myotatic Irritability: positive, with myoidema on both sides of chest muscles, being more marked on the left side.
   Chest has rather a flat appearance anteriorly but fills well with deep inspiration.
LUNGS:
   There is a slightly impaired note at the left apex, posteriorly, which does not come as low as the spine of the scapula. The percussion note is also, slightly impaired, below the left clavicle to the see/
second rib. The vocal resonance is increased, being equal in intensity to that on the right side. Bronchial breathing is clearly audible at both apices, posteriorly.

**SPINAL AUSCULTATION:**

*Whispered voice* is audible to the spine of the fifth dorsal vertebra, below which it gradually diminishes in intensity with loss of the articulate element. There is no clear cut break.

*Bronchial breathing* is clearly audible to the fifth dorsal spine, below which it quickly changes in quality and intensity, without any clear cut break.

*Spoken voice* is, also, audible to the fifth dorsal spine, below which it changes in quality and intensity.

**EXPANSION of LUNGS at the BASE:**

Right: 1½ ins.

Left: 1 in.

**GLANDS:**

There are a fair number of tiny lymph nodes just palpable on either side of the anterior aspect of the neck.
RIBS:

The ribs are equally spaced on both sides.

HEART:

The shadow of the heart is normally placed, but tends to be globular in shape.

LUNGS, BRONCHI & MEDIASTINUM:

The root of the right lung is well defined, and clear of the right border of the cardiac shadow. In the centre, there is a small dense area, over one rib. The lower and upper part of the root shadow pass imperceptibly into the apical and basal, branching shadow, following the lines of the bronchi. Branching is also seen into the mid zone of the lung. There are one or two tiny, opaque areas, towards the upper part of the root shadow. There is a faint, irregular, annular shadow, placed above and to the outer aspect of the root shadow.

The root of the left lung is ill defined, beyond the shadow of the left cardiac border. There is a small, circular shadow, at the upper limit of this region, and a few, tiny, opaque dots are also visible, towards the periphery of the root, situated in another small annular shadow. Ill defined, branching shadows are seen going to the apex and base, but the mid zone of the lung, is very indefinite.
WILLIAM WILLIAMSON aged 11. CASE LIV.
NAME: WILLIAM WILLIAMSON. AGED 11. CASE LIV.

HOME: Tayport. Father alive - Mother deaf and dumb.

HEIGHT: 4 ft. 9 ins. DREYER'S TABLES.

WEIGHT: 5 st. 10 lbs. CLASS C. VITAL Capacity = 2386 cc.

STEM LENGTH: 29 ins. " = 2287 "

CHEST MEASUREMENTS:

Easy Respiration: 27 ins. " = 2298 "

Full Inspiration: 28½ ins.

Full Expiration: 26½

VITAL CAPACITY: 2.12 litres.

PIRQUET SKIN TEST:

Human: negative.

Bovine: negative.

PHYSICAL EXAMINATION:

Prominent veins on the upper part of the chest are absent.

Vaso-motor paralysis: negative.

Myotatic Irritability: negative.

There is some degree of general pallor, but no conjunctival anaemia.

LUNGS:

There is an impaired percussion note at the right apex, anteriorly, to the second rib, where the breathing is vesico-bronchial in character. At this apex, posteriorly, there is also an impaired note, which is less extensive.

SPINAL/
SPINAL AUSCULTATION:

*Whispered voice* is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp diminution in intensity, with loss of the articulate element.

*Bronchial breathing* is clearly audible to the second dorsal spine, below which it rapidly changes in intensity and quality, but there is no clear cut break.

*Spoken voice* is clearly audible down to the second dorsal spine and below which it loses in intensity and quality rapidly, without, however, any clear cut break.

EXPANSION OF LUNGS AT THE BASE:

- **Right:** 1½ in.
- **Left:** 1¼ ins.

GLANDS:

The *tonsillar glands* are just palpable on both sides and below them, there is a chain of fine, tiny lymph nodes, reaching to the clavicle. They are barely palpable.
N.B. The whole of the Thorax has not been included.

RIBS:

There is a slight degree of crowding together of the ribs, in the right apical region.

HEART:

The shadow of the heart is normally situated and of average size.

LUNGS, BRONCHI & MEDIASTINUM:

The root of the right lung is composed of several, small, opaque areas, towards its centre, but is clearly defined from the right cardiac shadow. It passes, almost imperceptibly, into the branching shadows, which are well defined, going to the apex, mid-zone and base of the lung.

The percussion note is impaired at the right apex and corresponds to the radiogram.

The root of the left lung is replaced by three, small, faint, annular shadows, with one or two small, opaque dots in the lower shadow.

Branching shadows towards the apex, mid zone and base of the lung, are ill defined.

There is an appearance of hyper-illumination on this side, which is not obvious on the negative.
JAMES BAIKIE aged 12.  CASE LV.
NAME: JAMES BAIKIE. AGED 12. CASE LV.

HOME: Edinburgh. Father dead(?) Pulmonary Tuberculosis.

HEIGHT: 4 ft. 6 ins. DREYER'S TABLES.

WEIGHT: 5 st. 11 lbs. Class C. Vital Capacity = 2396 cc.


CHEST MEASUREMENTS:

Easy Respiration: 27 1/4 ins. " " = 2340 cc.

Full Inspiration: 29 ins.

Full Expiration: 26 3/4 ins.

VITAL CAPACITY: 2.15 litres.

PIRQUET SKIN TEST:

Human: negative.

Bovine: negative.

PHYSICAL EXAMINATION:

He has a large forehead with a deep set nose and a sallow complexion.

Prominent veins on upper part of chest are absent.

Vaso-motor paralysis: negative, with myoidema on right side of chest muscles.

Myotatic Irritability: positive.

LUNGS:

There is a slightly impaired note at the extreme aspect of the left apex posteriorly, and at the right apex, in front, to the second rib.

SPINAL AUSCULTATION:

Whispered voice is clearly audible to the spine/
spine of the second dorsal vertebra, below which a sharp break in intensity takes place, with loss of the articulate element.

**Bronchial breathing** is clearly audible to the spine of the second dorsal vertebra, below which there is a sharp change in quality, and marked diminution in intensity.

**Spoken voice** is clearly audible to the spine of the second dorsal vertebra, below which, there is a gradual change in quality and intensity.

**EXPANSION of the LUNGS at the BASES:**

Right: $1\frac{3}{4}$ ins.

Left: 1 inch.

**GLANDS:**

The tonsillar glands on both sides are clearly palpable. Extending down from them are two chains of small, lymph glands, which become quite tiny, external to the sterno-mastoid muscle, above the clavicle.
RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:
The ribs are equally spaced on both sides.

HEART:
The heart shadow is normally placed, but of the globular type, giving the impression of dilatation.

LUNGS, BRONCHI & MEDIASTINUM:
The root of the right lung is well defined, and is not clearly separated from the shadow of the right cardiac border. There are two or three opaque dots, towards the periphery of the upper part of this root shadow.

Branching shadows appear, well marked, in the apex and base, but less well marked in the mid zone of the lung.

The root of the left lung is well defined in its upper part, and of rounded appearance. Passing down to the base, from this rounded shadow, is the usual branching shadow. The mid zone of the lung is darker, with a less clearly defined branching. Towards the apex of the lung, perpendicular shadows are seen, arising from the upper part of the hilus, and in which an annular shadow is seen. In this region, there are a few, small and tiny opaque dots.
THOMAS MCDONALD aged 14.  CASE LVI.
NAME: THOMAS MacDONALD AGED 14. CASE LVI.

HOME: Edinburgh. Father & Mother both Deaf & Dumb.

HEIGHT: 5 ft. 6 ins. DREYER'S TABLES.

WEIGHT: 5 st. 12 lb. Class C. Vital Capacity - 2417 cc.

STEM LENGTH: 29½ ins. " " " " - 2332 cc.

CHEST MEASUREMENTS:

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<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
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<tr>
<td>Easy Respiration</td>
<td></td>
</tr>
<tr>
<td>Full Inspiration</td>
<td>Not recorded.</td>
</tr>
<tr>
<td>Full Expiration</td>
<td></td>
</tr>
</tbody>
</table>

VITAL CAPACITY: - 2.05 litres.

PIRQUET SKIN TEST:

- Human: negative
- Bovine: negative.

PHYSICAL EXAMINATION:

LUNGS:

There is an impaired percussion note at the left apex, posteriorly, and also in the right interscapular region. There is broncho vesicular breathing above the right clavicle.

SPINAL AUSCULTATION:

- Whispered voice is clearly audible to the spine of the fourth dorsal vertebra, below which there is a sharp diminution in intensity, and loss of the articulate element.
- Bronchial breathing is clearly audible to the fourth dorsal spine, below which there is a sharp change in quality and diminution in intensity.
- Spoken voice also changes in intensity below the/
the fourth spinal vertebra, but is less clear cut than the other two phenomena.

EXPANSION of the LUNGS at the BASE:

Right: $1\frac{1}{2}$ ins.

Left: $1\frac{3}{4}$ ins.

GLANDS:

A few, tiny, cervical, lymph nodes are just palpable on both sides. Tonsillar glands are not clearly defined. There is a small gland palpable in the right axilla.
THOMAS C. MACDONALD AGED 14.
RADIOGRAM taken DURING FULL INSPIRATION.

N.B. A 'pin holed' plate.

RIBS:
The ribs are equally spaced on both sides.

HEART:
The shadow of the heart is normally placed, but rather of the globular type, suggesting dilatation or lack of tone.

LUNGS; BRONCHI and MEDIANSTINUM.

The root of the right lung shows, at the centre, a small elongated shadow, which stands out clearly from the shadow of the right cardiac border, and shows a small opaque dot at its upper margin. Above this, branching shadows extend upwards to the apex of the lung, in almost perpendicular fashion. No branching shadows are seen in the mid zone, and branching to the base of the lung is indefinite and obscured by seeming hyper-illumination.

The root of the left lung is only visible as a diffuse, hazy shadow, passing into ill-defined branching, perpendicularly placed, towards the apex of the lung. The scapular shadow tends to obscure the mid zone, and branching shadows to the base of the lung are not seen - even in the negative.
ADAM ERSKINE aged 11.

CASE LVII.
NAME: ADAM ERSKINE.  AGED 11.  CASE LVII.

HOME: Inverkeithing.  Father - dead.

N.B. This boy is a recovered case of cerebrospinal meningitis.

HEIGHT: 4 ft. 7 ins.  DREYER'S TABLES.


STEM LENGTH: 29 ins.  "  "  "  = 2287 cc.

CHEST MEASUREMENTS:

Easy Respiration: 26 ins.  "  = 2133 cc.

Full Inspiration: 29 ins.

FullExpiration: 25 ins.

VITAL CAPACITY: 2.50 litres.

PIRQUET SKIN TEST:

Human: faintly positive.

Bovine: faintly positive.

PHYSICAL EXAMINATION:

Prominent Veins on upper part of chest wall are present in mild degree.

Vaso-motor paralysis: negative.

Myotatic Irritability: present, with very slight myoidema over second left rib.

LUNGS: Nothing to note.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible down to the spine/
spine of the third dorsal vertebra, where there is a definite break in intensity, and loss of the articulate element.

**Bronchial Breathing** is clearly audible to the spine of the third dorsal vertebra, below which there is a gradual diminution in intensity, and change of quality. There is no clear cut break.

**Spoken Voice** is clearly audible to the spine of the third dorsal vertebra, below which it gradually changes quality, and loses intensity, without any clear cut break.

**EXPANSION of the LUNGS at the BASE:**

- Right: 1½ ins.
- Left: 1¾ ins.

**GLANDS:**

The tonsillar glands are well marked on both sides, and easily palpable. There are many small glands descending from these, which are continuous with tiny glands above the clavicles. They are of about equal size on both sides.
N.B. This plate is over exposed. The whole of the thorax has not been included.

RIBS:
The ribs are equally spaced on both sides.

HEART:
The shadow of the heart is normally placed, but tends to the globular type of heart.

LUNGS, BRONCHI and MEDIASTINUM:

The root of the right lung is ill defined, and is made up of several annular shadows. From the root region, branching shadows pass imperceptibly to the apex, where they are well defined, and to the base of the lung, where they are less clearly defined. The mid zone of the lung shows no clear branching shadows. There are two small nodules, towards the upper part of the root of the lung.

The root of the left lung shows up more clearly, but still is not well defined. There is a small annular ring of tiny opaque dots, towards the upper extremity of the hilus shadow. From this branching shadows pass perpendicularly to the apex. The branching shadows to the mid zone and base of the lung are indefinite, but little of this region of the chest is visible in the photograph.
NAME: DAVID WHITSON  AGED 13.  CASE LVIII.

HOME: Edinburgh.  Father dead.

HEIGHT: 5 ft. $\frac{1}{4}$ in.  DREYER'S TABLES.

WEIGHT: 6 st. 2 lbs. Class C. Vital Capacity - 2502 cc.

STEM LENGTH: $29\frac{1}{2}$ in.  "  "  "  "  - 2377 cc.

CHEST MEASUREMENTS:

Easy Respiration: $27\frac{1}{4}$ ins.  - 2340 cc.

Full Inspiration: $29\frac{2}{3}$ ins.

Full Expiration: $26\frac{1}{2}$ ins.

VITAL CAPACITY: 2.20 litres.

PIRQUET SKIN TEST:

Human: marked positive

Bovine: marked positive.

PHYSICAL EXAMINATION:

He has rather a flat type of chest in the upper half.

Prominent veins on the upper half of the chest are present in minor degree.

Vaso-motor paralysis: positive.

Myotatic Irritability: negative.

HEART:

The first sound in the mitral area is slightly rough.

LUNGS:

There is an impaired percussion note below the right clavicle, to the third rib. In this area, the breathing is bronchial in type, and vocal resonance is a little increased. At this right apex, posteriorly, the/
the breathing is also bronchial in type, with again, a slight increase of vocal resonance.

The percussion note at the left apex, posteriorly, is slightly impaired, as is also that at the left base, although there are two inches of expansion there. The breath sounds at the left apex are faint, but vesicular in type, with prolonged expiration. At the left base, the breath sounds are feebler than normal, but vesicular in type.

**SPINAL AUSCULTATION:**

*Whispered voice* is clearly audible to the spine of the third dorsal vertebra, below which there is a sharp break in intensity, and loss of the articulate element.

*Bronchial breathing* is clearly audible to the fourth dorsal spine, below which there is a sharp break in quality and intensity.

*Spoken voice* is clearly audible to the fourth dorsal spine, below which there is a sharp break in quality and intensity.

**EXPANSION of the LUNGS at the BASE:**

- **Right:** 1 in.
- **Left:** 2 ins.

**GLANDS:**

The tonsillar glands are just palpable on both sides. Below this region, there are very tiny lymph nodes running down to the clavicle on both sides, being more numerous on the left side.
DAVID WHITSON AGED 13.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

N.B. The whole of the Thorax is not included on the plate.

RIBS:

There is a slight tendency for the ribs to droop on the left side.

HEART:

The shadow of the heart is normally situated, but of the asthenic, atrophic type.

LUNGS, BRONCHI & MEDIASTINUM:

The root of the right lung is elongated, with rather a denser central shadow, which is distinct from the right cardiac border, and surrounded by a less dense shadow. There are several opaque areas going to form this darker shadow. Branching shadows to the base of the lung are well defined, but in the apex and mid zone of the lung, they are indistinct.

The root of the left lung is ill defined, having a general mottled appearance, without any clear definition. There are three tiny, opaque areas, in the upper aspect of the root shadow, arranged in annular fashion. From these nodules branching shadows proceed towards the apex. Branching shadows to the base are well defined, but less so towards the mid-zone of the lung.

Two prints are given here to illustrate marked differences, due to photographic technique only.
THOMAS MACMILLAN aged 14. CASE LIX.
NAME: THOMAS MACMILLAN aged 14. CASE LIX.

HOME: Tillicoultry. Father alive. Mother "lost".

HEIGHT: 4 ft. 10 ins. DREYER'S TABLES.

WEIGHT: 6 st. 5 lbs. Class C. Vital Capacity = 2564 cc.

STEM LENGTH: 27 ins. " " " = 1946 cc.

CHEST MEASUREMENTS:

Easy Respiration: 28 ins. " " = 2469 cc.

Full Inspiration: 30 ins.

Full Expiration: 27½ ins.

VITAL CAPACITY: 2.70 litres.

PIRQUET SKIN TEST:

Human: Negative.

Bovine: Negative.

PHYSICAL EXAMINATION:

Prominent Veins on upper part of chest - absent

Vaso-motor Paralysis: positive, very slight.

Myotatic Irritability: Negative.

LUNGS:

There is a slightly impaired note at the extreme apex of the left lung posteriorly.

The percussion note in both inter scapular regions is very slightly impaired.

Bronchial breathing is distinctly audible above the right clavicle.

SPINAL AUSCULTATION:

Whispered Voice is clearly audible to the spine of the second dorsal vertebra, below which there is/
is a sharp break in intensity and loss of the articulate element.

**Bronchial Breathing** is clearly audible to the second dorsal spine, below which there is a sharp change in quality and intensity.

**Spoken Voice** is clearly audible down to the second dorsal spine, below which it gradually diminishes in intensity and quality, with no sudden break.

**Right**: 2 ins.

**Left**: 1\(\frac{1}{2}\) ins.

**GLANDS:**

The tonsillar glands on both sides are just palpable, below which there is a short chain of tiny lymph nodes descending down to the clavicles.
THOMAS MACMILLAN. AGED 14. Years.
RADIOGRAM TAKEN DURING FULL INSPIRATION.

RIBS:
The Ribs are equally spaced on both sides.

HEART:
The Heart shadow is normally placed and of average size.

LUNGS, BRONCHI and MEDIASTINUM:
The Root of the Right Lung shows an ill defined faint shadow passing imperceptibly into fan like branching shadows to the apex, mid zone and base of the Lung. At the centre of the root shadow there is a small nest of tiny opaque dots arranged in annular fashion.

The Root of the Left Lung has the same ill defined appearance passing out to branching shadows towards the apex, mid zone and base of the lung, except at the very centre where there is a denser circular area in which some tiny opaque dots may be seen. There is also a tiny annular shadow just outside of this area. Above this central shadow there is another annular shadow.
NAME: ALEXANDER McMAHON AGED 14. CASE LX.

HOME: Leith. Father dead.

HEIGHT: 4 ft. 9½ ins. DREYER'S TABLES.

WEIGHT: 4 st. 7 lbs. Class C. Vital Capacity = 2606 cc.

STEM LENGTH: 28½ ins. " " " = 2199 cc.

CHEST MEASUREMENTS:

- Easy Respiration: 28½ ins. = 2601 cc.
- Full Inspiration: 30½ ins.
- Full Expiration: 28 ins.

VITAL CAPACITY: 2.10 litres.

PIRQUET SKIN TEST:

- Human: markedly positive.
- Bovine: markedly positive.

PHYSICAL EXAMINATION:

- There is an operation scar (Empyema) on the right side of the chest.
- Prominent Veins on upper part of chest wall are present on the right side to a mild degree.
- Vaso-motor Paralysis - positive.
- Myotatic Irritability - negative.

LUNGS:

- There is slight impairment of percussion note at the left apex posteriorly, where the breathing is broncho-vesicular. The percussion note in the right interscapular region is very slightly impaired.

SPINAL AUSCULTATION:

- Whispered Voice is clearly audible over the 1st dorsal/
dorsal spine, below which there is a sharp break in intensity with loss of the articulate element.

**Bronchial Breathing** is clearly audible to the second dorsal spine below which there is a sharp break in the quality and diminution of intensity.

**Spoken Voice.** is clearly audible to the second dorsal spine below which there is a sharp break in intensity and change of quality.

**EXPANSION OF THE LUNGS AT THE BASE:**

- Right: \(= 1\frac{1}{2}\) ins.
- Left: \(= 1\frac{1}{2}\) ins.

**GLANDS:**

There are a few tiny cervical lymph nodes descending from the tonsillar gland on each side which is just palpable.
RADIOGRAM TAKEN DURING NULL INSPIRATION.

ALEXANDER McMÄHON. AGED 14 Years.

RIBS:-

The Ribs are equally spaced on both sides.

HEART:-

The shadow of the Heart is slightly displaced to the left side, but of average size.

LUNGS., BRONCHI and MEDIASTINUM:-

The Root of the right Lung shows an indefinite mottling, clearly defined from the shadow of the right border of the heart. In this thin shadow there are at least two small opaque areas and two or three tiny opaque dots. Branching shadows from the root area are well defined to the apex, mid zone and base of the Lung where there is an appearance of hyper illumination.

The Root of the Left Lung is merely represented by the commencement of the branching bronchial shadow to the apex, mid zone and base of the Lung. The apical shadow being perpendicular in type. At the upper part of the root there is a well defined annular shadow and two small opaque dots. Below this area there are two or three tiny opaque dots.
NAME: IAN DUNCAN aged 14.  CASE LXI.
HOME: Leith.  Father dead.
HEIGHT: 5 ft. 7½ ins.  DREYER'S TABLES.
WEIGHT: 9 st. 8 lbs.  Class C. Vital Capacity = 3443 cc.
STEM LENGTH: 34 ins.  " " " " = 3275 cc.
CHEST MEASUREMENTS:
   Easy Respiration: 33 ins.  " " = 3414 cc.
   Full Inspiration: 35 ins.
   Full Expiration: 32 ins.
VITAL CAPACITY: 4.20 litres.
PIRQUET SKIN TEST:
   Human: Positive.
   Bovine: Positive.
PHYSICAL EXAMINATION:
   Prominent Veins on upper part of the chest are present on the right side to a mild degree.
   Vaso-motor Paralysis: Negative.
   Myotatic Irritability: Negative.
   He was literally "head and shoulders" above any other boy in the school as his figures show. His Mother is a Dane and he had the facial characteristics of the race.
LUNGS:
   The percussion note is very slightly impaired in the right interscapular region.
SPINAL AUSCULTATION:
   Whispered voice is clearly audible to the spine of the/
the second dorsal vertebra, below which there is a sharp break in intensity, with loss of the articulate element.

**Bronchial Breathing** is clearly audible to the second dorsal spine, below which there is a sharp change in quality, with a corresponding loss of intensity.

**Spoken Voice** is clearly audible, down to the second dorsal spine, below which, there is a sharp change in quality, and diminution in intensity.

**EXPANSION** of the **LUNGS at BASES**:

- Right: 2 ins.
- Left: 2 ins.

**GLANDS**:

A few, tiny glands are just palpable, on each side of the neck.
IAN DUNCAN. AGED 14 Years.

RADIOGRAM TAKEN DURING FULL INSPIRATION.

N.B. There are many large pin holes in this plate.

RIBS:-

The ribs are equally spaced both sides.

HEART:-

The shadow of the Heart is normally situated and of average size.

LUNGS. BRONCHI and MEDIASTINUM:-

The Root of the Right lung is represented by a concentration of the fan like branching from the apex mid zone and base of the lung there is no clear defined shadow. There are however several small opaque areas scattered throughout the root region. There is a well defined annular shadow towards the upper and medial aspect of the root area.

The Root of the Left Lung shows very much the same indefinite appearance with one very clear annular shadow in which are three tiny opaque dots. The branching shadows to apex, mid zone, and base of the Lung are less clearly marked than on the right side.