<table>
<thead>
<tr>
<th>Case</th>
<th>Name</th>
<th>Age</th>
<th>X Ray No.</th>
<th>Nature of Case</th>
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</thead>
<tbody>
<tr>
<td>27.</td>
<td>Mary Conway</td>
<td>3½</td>
<td>B 197</td>
<td>Radius</td>
</tr>
<tr>
<td>28.</td>
<td>Wilfrid Dixon</td>
<td>18</td>
<td>D 151</td>
<td>&quot;</td>
</tr>
<tr>
<td>29.</td>
<td>Jessie Lindsay</td>
<td>10</td>
<td>B 208</td>
<td>&quot;</td>
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<td>30.</td>
<td>Thos. Bellany</td>
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<td>31.</td>
<td>Frances Malcolm</td>
<td>3</td>
<td>D 146</td>
<td>&quot;</td>
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<tr>
<td>32.</td>
<td>A. W. Ritchie</td>
<td>25</td>
<td>E 190 &amp; F 51</td>
<td>&quot;</td>
</tr>
<tr>
<td>33.</td>
<td>John Daly</td>
<td>45</td>
<td>F 85</td>
<td>Ulna.</td>
</tr>
</tbody>
</table>
John Virtue,

10 St. Stephen Street,

Stockbridge.

Accident: On 18th February, 1910, he fell and injured his left arm. He came to the S.O.P.D. where green-stick fractures of both bones was diagnosed. In straightening the forearm the bones were completely fractured.

X Ray: 19.2.10 - Subperiosteal fractures of both radius and ulna, about 3" above wrist joint.

Treatment: Massage and movement daily, wool, bandage and sling.

Dismissed: 15th March, 1910 - four weeks after the accident. There was firm union and every movement was fully present. There was no deformity.

He again came to the S.O.P.D. on the 4th April, 1910, having fallen a few days previously and injured the same arm.

X Ray: 4.4.10. (missing)

Fracture of both bones of left forearm at lower third, i.e. at site of former fracture.

Treatment: Similar.

Dismissed: 19th April, 1910 after his second accident.

There was then firm union, complete range of movement, and no deformity.

Report: 28th February, 1911. He is at present in the country, so could not be examined. His mother reports that the arm is as good as the other one and that he never complains of it.
George Cochrane, 12.
6 Bedford Street, Edinburgh. X Ray - E 60.

Accident :- On 21st April, 1910, he fell off a chair and hurt his left arm.

X Ray :- Fracture of both bones at middle of forearm - fragments in good position.

Treatment :- Massage and movement daily. No splints. Wool, bandage and sling.

Progress :- May 2nd - eleven days from accident.
Callus perceptible, firm union of fragments, no limitation of movements.
May 9th - eighteen days from accident. He has been climbing on to vans.

Discharged :- 19th May. Excellent result.
Number of massage seances - 16.

Report :- 1.7.11.
Appearance and movements perfect.
See X Rays of this date.
David Welsh, 12.

36 Angle Park Terrace, Edinburgh.

Card - A435.

X Ray - B166.

Accident: On 24th May, 1910, he fell on his left hand, and hurt his forearm. He came to the S.O.F.D. where a greenstick fracture of both bones of left forearm was diagnosed.

Under Ethyl Chloride anaesthesia the arm was straightened.

X Ray: Subperiosteal cracks in middle of shafts of both ulna and radius.

Treatment: Massage and movement.

Wool bandage, sling.

Number of massage seances - 16.

Discharged: 15th June, 1910 - three weeks after accident.

Report: 31.3.11. The arm felt weak for some time after his discharge, but soon grew stronger. It never troubles him now. In appearance, range of movement and musculature, the result is perfect.

The X Rays 31.3.11 show union (marked by sclerosis) in good position.
Accident: On 9th June, 1910, she fell and hurt her left forearm. She was brought to the S.O.P.D. and a greenstick fracture was diagnosed. In straightening the arm, the fracture was made complete.

X Ray: 11.6.10. Subperiosteal fracture of both bones about the middle of the forearm. Alignment of fragments excellent.

Treatment: Massage and movement.
Wool, bandage, sling.
Number of massage seances - 12.

Discharged: 1st July, 1910 - three weeks after accident. There was then firm union and complete function.

Report: 2.3.11.
She went back to school immediately after her discharge from hospital. The arm has given no trouble since. The appearance and function of the arm is perfect.
Accident : - On 11th July, 1910 she fell on her right arm while skipping. She was brought to the S.O.F.D. where greenstick fracture of bones of forearm was diagnosed. The arm was straightened under Ethyl Chloride anaesthesia, and anterior and posterior splints applied.

X Ray : - 12.7.10. Transverse fracture of both bones of right forearm in their lower third - in excellent position.

Treatment : - Massage and movement daily.
Anterior splints removed. Wool bandage and sling.
Number of massage seances - 15.

Discharged: - 4th August, 1910 - three and a half weeks after accident. There was then firm union in excellent position and full and free movement at all the joints.

Report : - 7.3.11. The arm has never troubled her. There is absolutely no difference between the arms either in appearance or function. The X Ray shows good union in excellent position.
Case 5.

12. 7. 10

7. 3. 11

Teannie Short

X Ray C75

Right Arm.
James Forsyth, (2).
29 Bellevue Road, Edinburgh.
Card - B 717.
X Ray - D 32.

Accident: About the middle of July, 1910, he fell and injured his left arm. It was treated as a bruise. He was brought to the S.O.P.D. two weeks later, on 1st August, owing to the continuance of pain. There was then perceptible thickening at the middle of the ulna.

X Ray: Transverse fracture of both bones of forearm, with no displacement.

Treatment: Massage and movement.

Progress: The boy only attended twice as his arm "felt all right".

Report: 3rd April, 1911.
The arm has never troubled him since. Form and movements are perfect.

X Ray: 3.4.11. Site of fracture is marked by slight sclerosis and callus is just perceptible.
Case 4

Accident :- On 12th September, 1910, he fell and hurt his right forearm. He was brought to the S.O.P.D. a week later on account of the continuance of pain.

X Ray :- Subperiosteal transverse fracture through the middle of both bones of forearm, with no displacement.

Treatment :- Massage and movement.
Wool, bandage and sling.
Number of seances - 10.

Discharged:- 5th October, 1910, three weeks after the accident. There was then firm in good position and complete movements.

Report :- 13.3.11.
He has used the arm freely since his discharge and has never complained of it in any way. Appearance and function are perfect.
The X Ray 13.3.11 shows sclerosis at seat of fracture.
Case 7.

20.9.10

18.8.11

18.3.11

James Ronnie

15 Grove Street, Edinburgh.  X Ray - E 105.

Accident :- On 23rd November, 1910, he fell and injured his right arm. He came to the S.O.P.D. where a greenstick fracture of the forearm was diagnosed. The arm was straightened and a gutter splint and sling applied.

X Ray :- 25.11.10. Fracture of both bones at middle of forearm with no displacement.

Treatment :- Massage and movement. Gutter splint and sling.

Progress :- 9.12.10 - two weeks and two days after accident. There was strong union, plentiful callus, complete range of movements, no interference with supination and pronation, and no deformity. He can perform movements with a 21b. dumb-bell without discomfort. Splint and sling removed. The X Rays 9.12.10 shew that the good position of the fragments has been maintained.

Discharged :- 20th December, 1910 - four weeks after accident. Number of massage seances - 14.

Report :- 11.4.11. The arm has never given him any trouble. The result is in every respect excellent. There is no deformity and no limitation in movement. The X Rays 11.4.11 shew good union (marked by sclerosis) and good alignment.
Accident :— On 25th March, 1911, he fell and injured his left arm. He came to the S.O.P.D. where a greenstick fracture of the forearm was diagnosed. The forearm was straightened and anterior and posterior Gooch splints applied.

X Ray :- 27.3.11. Fracture of both bones at middle of forearm, with no displacement.

Treatment :- Massage and movement. Jone's Gutter splint and sling.

Progress :- 7th April - Splint removed.
11th April - Two weeks after accident. Union was firm, movements free and complete in range, appearance of arm excellent. The sling was now removed. The X Rays of this date shew good alignment of the fragments, One view shews a slight angling of the radius. The external callus is well seen, but is not in excess.
Rose Foy, 14.
Shop-girl,
27 Milton Street, Edinburgh.

Accident :- On 21st March, 1911 she fell off a box and injured her left arm. She kept her arm in a sling for a week, and only came to the S.O.P.D. on the 23.3.11 because of the continued pain and swelling.

X Ray :- 23.3.11 - Fracture of both bones at middle of forearm with no displacement.

Treatment :- Massage and movement. Jone's gutter splint and sling

Progress :- 3.4.11 - two weeks since accident - union was firm and movements full and free without discomfort. The splint was removed.

14.4.11 - three and a half weeks after accident - she reported that she had been washing the floor and felt no discomfort while doing so.

Number of massage seances - 13.

Discharged :- 15th April, 1911 - three and a half weeks after accident.

Appearance and function were excellent.

X Rays :- 15.4.11 shew excellent alignment of the fragments, and plentiful but no excess of callus.

Remarks :- She was never off work during treatment.
John Somerville, (12),
Wardens' Quarters, Leith Street.

Accident :- On 16th February, 1910, he fell on his right hand.

X. Ray :- 19.2.10. Fracture of both Radius and Ulna about 2" above wrist joint; slight backward displacement of distal fragment of Radius.

Treatment :- 16.2.10. As it was a greenstick fracture, Ethyl Chloride was given and the arm straightened.
Gutter splint, massage and movement.
Number of massage seances - 14.

Dismissed :- 7th March, 1910 with perfect junction, i.e. three weeks after accident.

Report :- 22nd March, 1911.
The arm has given no trouble since dismissal.
The appearance and junction are perfect.

See X Ray 22.3.11. Position of fragments excellent.
Maggie Rynie, 10.  
86 George Street, Edinburgh.  
Card - B 1915.  
X Ray - D 76.

Accident :- On the 26th August, 1910, she fell off a swing and injured her left arm.

X Ray :- 27.8.10. Fracture of both bones of forearm at their middle with slight backward angling at the site of fracture.

Treatment :- Massage and movement.  
Gutter splint and sling.

Discharged:- 28th September, 1910 - four and a half weeks after the accident. Union was firm, appearance and movements perfect.  
Number of massage seances - 16.

Report :- 8.4.11.  
The arm has never troubled her. She returned to school immediately after her discharge and used the arm freely. The result is perfect in every respect.

X Ray :- 8.4.11 shews good union and excellent alignment.
John Sneath, 18.
Checker,  
8 W. Norton Place, Edinburgh.

Card - B 5561.  
X Ray - B 14 E 144.

Accident :- On 2nd April, 1910, he fell on his left hand while playing football. He came to the S.O.P.D. because of the swelling and loss of power to move the wrist. There was great localised tenderness over the lower epiphyses of the radius and ulna.

X Ray :- 4.4.10 showed no definite lesion. The ulnar epiphysis seems separated.

Treatment :- Wool, bandage, sling, massage and movement. He did not return. The wrist soon became all right again.

In October he again fell while playing football and broke the left radius in its lower third. This was treated at another hospital by anterior and posterior splints, which he wore six weeks. The splints were taken off for massage and movement from the very beginning. He was two months off work on full pay. He had then full use of his wrist and arm.

On 12th December, 1910, he again fell playing football, and hurt the same arm. He came to the S.O.P.D. where fracture of both bones in lower third of forearm was diagnosed.

X Ray :- Apparent Refracture of a healed fracture of the radius and a fresh subperiosteal fracture of the ulna. The fractures are transverse and in the lower third of the forearm. The ulnar fragments are in good alignment, but there is slight angling outwards at the site of the radial fracture.

Treatment :/
John Sneath, - continued.

Treatment: - Massage and movement. Anterior splint for protection and sling.
Number of massage seances - 12.

Discharged: - 7th January, 1911, less than four weeks after third injury.
He was never off work during the treatment of this last injury, working with his right hand.

Report: - 12.4.11.
He commenced using his left hand immediately after his discharge. The arm has never troubled him since.
The movements of wrist and elbow are perfectly free and of full range. There is no deformity, but the lower end of the ulna is slightly prominent in complete supination. The alignment of the bones seems perfect and there is no excess of callus to be felt.

X Rays: - 12.4.11 show firm union in good position. There is less angling at the site of the radial fracture than is shown in X Ray 13.12.10.
Case 13.

12.4.11

John Sneath.

X-Ray: B14 + E14/44

Left
Flora Barclay, 16.
Clerkess,
2 St. David's Terrace, Edinburgh.

Accident :- On Saturday, 24th Sept. 1910, she fell while roller-skating and injured her right arm severely. She came straight up to the S.O.P.D. where fracture of both bones at middle of forearm was diagnosed. The arm was set and put in splints (anterior and posterior Gooch splints) and a sling.

X Ray :- 26th September 1910. Fracture of both bones at middle of right forearm. The ulnar fragments are in good position but the radial fragments are over-riding to the extent of \( \frac{1}{2} \)".

Treatment :- Massage and movement, daily at first. Aluminium gutter splint and sling.

Progress :- The swelling and bruising rapidly disappeared, and the appearance of the arm soon suggested a better alignment of the radial fragments.

After a few days of massage, the radial and ulnar styloids assumed a relationship as regards level, which was near to the normal.

There was firm union at the end of the second week. Passive movements caused no discomfort and voluntarily movements of the fingers were free and painless. The splint and sling were discarded at the end of the fourth week.

28th October, 1910 - five weeks after accident. Union was firm, every movement was easy and of full range. She was using the arm freely. There was slight angling of the arm at the site of the fracture.

The/
The X Ray 28.10.10 shews excellent position of the fragments with only a slight angling of the radius. Callus is plentiful but not in excess.

Number of massage seances - 20.

5th November, 1910 - six weeks after the accident.

She was never off work, keeping the shop while she attended the R.I.E. for treatment. She was on full pay all the time.

One week after her discharge, i.e. seven weeks after accident, she could again write easily and perform all her duties. The arm has caused her no trouble since her discharge and feel as strong as ever it was.

In appearance, there is still slight angling outwards at the site of the fracture apparent only in pronation as is seen in the photograph of this date.

All movements are perfectly present and of full range.

The X Rays 10.4.11 shew strong union with no excess of callus. The apposition and alignment of the fragments is remarkably good. The ulnar and radial styloids are almost normal in their comparative levels.

The X Ray 26.9.10 shews over-riding of the radial fragments remained, after the so-called 'setting'.

The succeeding X Rays shew that a better apposition and alignment followed the treatment by massage. This is to be explained by the spasm and contraction of the muscles acting on these bony fragments, being allayed by the gentle and daily massage.

The ultimate result is extremely satisfactory.
Wm. McBean, 23.  
Quarryman,  
Blackness Castle, Linlithgow,  
and 12 Guthrie Street, Hamilton.

Accident :- On 31st. May, 1910, a large stone fell on his left forearm while he was at work. He was brought to the S.O.P.D., R.I.E., where fracture of both bones of left forearm was diagnosed.

X Ray :- 1.6.10 Comminuted fracture in upper third of ulna, with slight backward displacement of the lower fragment; fracture of radius just above its mid point, with slight outward and upward displacement of the lower fragment, causing $\frac{1}{8}$" overriding. There is no lessening of the Inter-osseous space.

Treatment :- Massage and movement, Gutter splint and sling. The forearm was placed in supination.

Progress :- 21.6.10 - three weeks after accident. The fragments were not firmly united as yet. He could voluntarily close his fist. Movements at the wrist and elbow were passively performed and were of almost full range. Supination was complete in range, pronation was still limited.

X Ray :- 21.6.10 shews slightly more angling at the site of the ulnar fracture. There is less overriding of the radial fragments by $\frac{1}{8}$" and the outward displacement has apparently disappeared. There is no lessening of the Interosseous space.

On the 11.7.10 - six weeks after accident - union was firm. Extension at the elbow was almost complete in range. Full flexion could be performed passively, but was incomplete when voluntarily performed. Supination was complete but pronation/
Wm. McBean - continued.

pronation still incomplete in range. The splint was now removed altogether.

X Ray :- 11.7.10. shews excellent alignment of the ulnar fragments, but still slight overriding of the radial fragments. The displacements have certainly not increased and there is no lessening of the Interosseous space.

Discharged:- He ceased to attend after the 19th July 1910 - seven weeks after the accident.

Number of massage seances - 21.

Report :- April, 1911.

Unfortunately he could not get away from his work in Hamilton to be examined, but kindly wrote answers to my questions, and is to call on me for examination when next in Edinburgh.

Duration off work. and on compensation :- four months.

He began work again on 6th October, 1910. His arm felt very weak and easily tired. Now (April, 1911) he feels his arm "exceedingly well" and is quite able to do the hard manual work of a quarryman. There is still a bend in the arm (probably outwards due to the slight permanent overriding of the radial fragments) and pronation (?) is still not quite complete in range.

Remarks :- This was a very severe injury, not only of the bones but also of the soft parts. He left hospital of his own accord while yet the muscles had incompletely regained their power. The result is therefore highly satisfactory.
**Alex. Mackay, (32).**

43 Balcarres Street, Edinburgh.

Chaffeur.

<table>
<thead>
<tr>
<th>Accident</th>
<th>Motor car overturned on 5th October, 1910.</th>
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<tr>
<td>X Ray</td>
<td>Transverse fracture of both bones of right forearm, at junction of middle and lower thirds, also chipping of lower end of Radius on ulnar side, entering Radio Carpal joint.</td>
</tr>
<tr>
<td>Ulna in good position: Radial fragments overriding slightly and lower fragment displaced inwards.</td>
<td></td>
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<tr>
<td>Treatment</td>
<td>Tin Gutter splint, sling, massage and movement.</td>
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<td></td>
<td>37 visits, at first daily. Splint and sling discarded at end of four weeks.</td>
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<tr>
<td>Dismissed</td>
<td>Left of his own accord on 30th November, 1910. There was then good union, and almost complete range of movement.</td>
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<tr>
<td>Duration off work</td>
<td>Eight weeks.</td>
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<td></td>
<td>One week after dismissal, he was driving a motor car and was able to start the engine with his right arm.</td>
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<tr>
<td>Compensation</td>
<td>None.</td>
</tr>
<tr>
<td>Condition on 24th February, 1911.</td>
<td>He feels his arm quite fit for his work. There is apparent deformity, the radial styloid is slightly above the level of the ulnar styloid. Muscles strong. Range of movement: flexion and extension at wrist and elbow complete. Pronation and supination almost complete. See photographs.</td>
</tr>
<tr>
<td>Remarks</td>
<td>Not a brilliant result as regards appearance, but the function of the arm is almost completely restored.</td>
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</tbody>
</table>
The X Ray, 25.2.11 shows there is still over-riding of the radial fragments. This X Ray would suggest greater deformity than is actually present as shown by the photographs. It also suggests loss of the interosseus space and consequent loss of supination and pronation. Again the photographs prove that only pronation is interfered with, and to so small a degree as to be practically negligible.
On 22nd November, 1910, while going to school, she fell on the ice, landing on her left hand. The left forearm felt very sore. She came to the S.O.P.D. next day.

23.11.10. Transverse fracture of both bones of forearm, about 1" above the wrist joint. The lower radial fragment is displaced outwards, causing angling of the ulna at the site of fracture.

The arm was straightened and the fracture "set" under a general anaesthetic. Anterior and posterior Gooch splints and a sling were applied. Massage and movement daily.

24.11.10. shows apparent excellent alignment of the fragments. This is an antero posterior view.

26.11.10. is a lateral view and shows there was still a posterior displacement of the fragments.

These X Rays show the importance of having both antero posterior and lateral views in cases of fractures of the extremities.

continued. - Massage and movement were continued. The two splints of Gooch were replaced by a single gutter splint of aluminium.

5.12.10. was disappointing as it shewed more displacement than one would have anticipated from a clinical examination of the arm. It no doubt exaggerates the actual amount of deformity.

In these X Rays the ulnar fragments are in good position, but/
but the lower radial fragment is displaced outwards and backwards. Nothing was done to reset the fragments as the X Rays were interpreted as exaggerating the real amount of displacement.

Progress note: 12.12.10 - three weeks after accident. Union is firm and movements very good indeed. There is a slight Radial bend at the site of fracture. The splint was now dispensed with.

X Ray: 22.12.10 - The antero posterior view shows the fragments united with slight outward angling of the lower radial fragment. The lateral view shows marked backward displacement of the lower radial fragment. This again seemed an exaggeration of the actual amount of backward displacement found on clinical examination.

Discharged: 27.12.10 - five weeks after accident. There was then firm union, free movement in every direction and of complete range. Pronation and supination were in no degree limited. There was no apparent or palpable backward displacement of the lower radial fragment. The only deformity was a slight angling outwards at the site of the fracture.

Number of massage seances: 27.

Report: 12.4.11. She went back to school immediately after her discharge. She has never complained of her arm and plays at games as freely as before her accident. There is still slight outward bending at the lower third of the forearm, but this is not very marked as may be judged from the photographs of this date. The movements of the arm are perfect in range and freedom.

X Rays: 12.4.11 - show the ulnar fragments united in perfect alignment.
alignment, and the radial fragments united with very slight outward and backward displacement.

Remarks

This case is very instructive. First of all, the X Rays of the 24th and 26th November prove that "setting" of a fracture is apt to be inadequate and imperfect. Then it will be noted that no further attempt to set the fragments was made. Everything was left to massage not only to procure good function but also to procure a better position of the fragments. The theory of this is that displacement is largely due to spasm and contraction of muscles. Get rid of this contraction by light massage and the displacement disappears or is at least diminished. In this case the displacement was diminished to a considerable extent.

The X Rays:

5.12.10 and 22.12.10 show how these records may exaggerate displacements and prove the necessity of combining clinical observation with the interpretation of X Ray negatives. The final result in appearance and function is a proof of the wisdom of the method of treatment employed. Lastly, it was a fact remarked upon by many who watched the progress of this case from the beginning, that the patient never complained of any pain or discomfort in the arm after the first two days.

During the course of her treatment she travelled in and out daily by train from Cramond.
Robert Mackee, (57)
Gardener,
44 Causewayside, Edinburgh.

X Ray - A 15.

Accident : - On 1st January, 1910, he fell on his right arm. It was treated as a bruise.

X Ray : - 7.1.11.
Fracture of right ulna in its lower third, transverse and with no displacement.

Treatment : - Massage and movement, wool, bandage and sling.
Number of massage seances - 14.

Dismissed : - 22nd January, three weeks after accident. He had then full movement at all the joints, and the union was firm.

Report : - 30.3.11.
Compensation - None.
Duration off work - six weeks - He could have started work sooner had the weather been suitable for his work as a gardener.

He felt his arm weak during the first week after recommencing his work.

Since then it has been as strong and useful as ever it was.

Appearance and movement are excellent.

The callus over the site of fracture is still felt on examination.

The X ray 30.3.11 shows an excess of callus, and a slight displacement of the lower fragment outwards, i.e. away from the radius.
Thos. Cranston, 39,
Coal-miner

Accident :- On 18th January, 1910, his right forearm was compressed between two hutchas.
He was brought to the S.O.P.D. and the head of the radius was found to be dislocated forwards.
This was immediately reduced.

X. Ray :- Transverse fracture in middle of shaft of ulna, and chipping of capitulum or head of radius (indefinite)

Treatment :- Wool, bandage, sling, no splint, massage and movement daily. Number of massage seances - 33.

Dismissed :- 26th February, 1910, five and a half weeks after accident.

Compensation:- Half pay for eight weeks.

Report :- 28th February, 1911.

He commenced work when his compensation was stopped and felt able for as hard work as before his accident.
He has been working as a miner or labourer ever since.
Appearance of arm perfect, good strong muscles.
Flexion at elbow complete, extension very slightly limited.
Pronation and Supination limited.

Remarks :- The X Ray of 22.2.11 shows a healed fracture at middle of shaft of ulna, with extension of the callus across the interosseus space. This explains his limitation of pronation and supination. This is disappointing and the writer considers that less massage may be indicated, more attention being paid to movements.
Mrs. Shepperd, (46).

Fieldworker, 44 India Place, Edinburgh.

X Ray - B 29.

Accident: On the 26th March, 1910, she received a blow from a stick on the lower end of the ulna. Owing to the continuance of swelling and pain she came to the S.O.P.D. on the 11th April, seventeen days later. During this time she has been steadily at work in the fields. Callus was quite perceptible on examination.

X Ray: Fracture of ulna 1" above its lower end.

Treatment: Before coming to hospital, she bathed her arm with cold water and rubbed it. She attended the S.O.P.D. on eight occasions for massage and movement and left of her own accord on 21st April. She had continued at her work all the time.

Report: 1.3.11.

No evidence of fracture - no callus felt, every movement perfect. The arm has never troubled her since she left the S.O.P.D.

X Ray: Practically no evidence of fracture. Ulnar styloid is apparently absent.
Wm. Angus, 27.

Railwayman, 1 Wardlaw Place, Edinburgh.

Accident: On 2nd June, 1910, he received burns over his back and right arm in a railway collision. His left forearm was also hurt. The burns were dressed and he was put on massage for a badly bruised forearm.

X Ray: 10.6.10 - revealed a transverse fracture in the middle of the ulna, without displacement.

Treatment: Massage and movement continued.
Number of massage seances - 13.

Discharged: 8th July, 1910 - five weeks after accident.

Duration off work and on compensation - Five weeks.

Report: 4.3.11.

He felt his arm weak for a few days after commencing work again. He feels no difference between his two arms now. The arm is very muscular, perfect in movement and in form. X Ray - 4.3.11 shows union with some excess of callus, but in excellent position.
Wm. Tosh, 7.

1 Beaverbank Place, Edinburgh.

Card - A 4677.

X Ray - F 160.

Accident :- On 11th March, 1911, he fell from a tree and hurt his right arm.

X Ray :- Transverse subperiosteal fracture at middle of ulna.

Treatment :- Massage and movement. Wool, bandage and sling.

Progress :- 29.3.11 - two and a half weeks after accident - there was good union, perfect range of movements without discomfort. The sling was now omitted.

Discharged:- 7.4.11. - four weeks after accident. Appearance and movements were excellent.

Number of massage seances - 13.
Mrs. Ford, 39.
61 High Riggs, Edinburgh.
Card - A 4670
X Ray - F 170.

Accident : - On 11th March, 1911 she received a kick over the middle of the left forearm. She came to the S.O.P.D. where a bruise was diagnosed. The arm was placed in a sling and massage and movement commenced.
She complained of great tenderness over the middle of the subcutaneous border of the ulna, and an X Ray was therefore taken a week after the accident.

X Ray : - 17.3.11. revealed an incomplete fracture in the middle of the shaft of the ulna.
The treatment remained unchanged.
Number of massage seances - 10.

Discharged : - She ceased to attend on the 30th March, 1911 - two and a half weeks after accident.

Remarks : - Local tenderness if persistent often means that the bone has been severely injured.
9 Henry Street, Edinburgh. X Ray - F 94.

Accident :- On the 10th February, 1911, she fell off a chair with her right arm under her. She was brought to the S.O.P.D. where a fracture at the middle of the ulna and a forward dislocation of the head of the Radius was diagnosed. The dislocation was reduced, the fracture set, and splints applied.

X Ray :- 11.2.11. Oblique fracture at middle of ulna, with slight overriding.

Treatment :- Massage and movement daily. Jones's Gutter splint and sling.

Progress :- 21.2.11. Eleven days after accident - all movements at wrist and elbow present and complete in range. These movements she performs voluntarily and without discomfort.

1.3.11 - two and a half weeks after accident - firm union - complete junction. Sling and splint removed.

Dismissed :- 3.3.11 - three weeks after accident. She was spinning a top with her right hand on this date. There is slight angling at site of fracture.

Number of massage seances - 16.

Report :- 24.3.11.
She has used her arm freely since her dismissal and never complained of any discomfort. Every movement is perfect. There is still slight angling felt at site of fracture, but this does not give rise to any apparent deformity.
Wm. Campbell, (53).
Brewer's Labourer,
9 Abbey Strand, Canongate.

X Ray - A 136.

On 22nd February, 1910, he fell on his left forearm.
Two years previously he injured the same arm, at the wrist.

Transverse subperiosteal fracture of radius in its lower third with no displacement.
Healed Colles Fracture, with ulnar styloid still ununited.

Massage and movement daily. Gutter splint, wool, bandage and sling.

Number of massage seances - 24.

1st April, 1910 - five and a half weeks after accident. There was then strong union and full movement.

He returned to work the day after dismissal. He was not on compensation.
The arm felt quite strong on returning to work and has never caused him any discomfort since.
Appearance musculature and movements are perfect.

29.3.11. shows good union in good position.
The ulnar styloid is still ununited.
Wm. McLean, 13.
3 Lyne Street, Edinburgh.

Card - A 320.
X Ray - B 136.

Accident :- On 1st June, 1910, he fell and hurt his left arm.

He came to the S.O.P.D. where a greenstick fracture of the left radius was diagnosed. The arm was straightened and put up in anterior and posterior splints for the night.

X Ray :- 2.6.10 Incomplete fracture at middle of radius in excellent position.

Treatment :- Massage and movement daily. Wool, bandage and sling - no splints.

Number of massage seances - 11.

Discharged :- 15th June, 1910 - two weeks after accident. The result was perfect in every respect.
He returned to school next day.

On the 11th of July, he again fell and hurt the same arm. Bruising was diagnosed and after four massage seances, the arm was all right again.

Report :- 7.4.11.
The arm has never troubled him since.
In appearance, musculature and function, the result is perfect.
The X Ray 7.4.11 shows perfect union in good alignment.
Mary Conway, 3½.
24 Guthrie Street, Edinburgh.

Card - A 1080.

X Ray - B 197.

Accident :- About the 1st June, 1910, she fell off a chair and hurt her right arm.
The mother treated it as a bruise and only brought her to the S.C.P.D. on the 7th June because of the continued pain.

X Ray :- Fracture in lower third of Radius, transverse and without displacement.

Treatment :- Massage and movements daily.
Wool, bandage and sling.
The mother only brought her twice for massage, on the 8th and 13th June. Last visit is two weeks from date of accident.

Report :- 31.3.11.
The mother ceased to bring the child to hospital as the arm seemed all right again. The child has used it continuously in her play and never complained.
It is impossible to tell which was the injured arm.
The X Ray shows union in good position.
Wilfrid Dixon, 18.
Photo Engraver,
25 Reid Terrace, Edinburgh.

Card - B 3577.
X Ray - D 151.

Accident :- On 6th October, 1910, he fell off a bench on to his left hand.

X Ray :- Transverse fracture in lower third of radius with no displacement.

Treatment :- Massage and movement. Wool, bandage and sling.
Number of massage seances - 13.

Discharged: - 1st. November, 1910 - three and a half weeks after accident. There was then firm union and perfect movement.

Report :- 10.4.11.
He went back to work the week following his discharge. He was therefore four weeks off work, receiving compensation. His arm felt weak for a week or two. It never troubles him now.
The result is perfect in every respect.

X Ray :- 10.4.11. Firm union in perfect alignment. Sclerosis marks the site of fracture.
Jessie Lindsay, 10. Card - A 1170.
12 Orwell Place, Edinburgh. X Ray - B 208.

Accident :- On 9th June, 1910, she fell while playing and hurt her left arm.

X Ray :- Transverse fracture in lower third of radius, with slight outward displacement of lower fragment.

Treatment :- Massage and movement daily.
Wool, bandage and sling.
Number of massage seances - 13.

Dismissed :- 1st July, 1910 - three weeks after accident. There was then firm union and complete movement.

Report :- 3.3.11.
She returned to school immediately and has never complained of the arm since.
The hand is slightly displaced to Radial side, but this is hardly noticeable.

X Ray :- 3.3.11. Show firm union, with a slight backward bend of radius at site of fracture. These X Rays also show an apparent detachment of the ulnar styloid.
Miner,
5 Gardiner's Close, Cockenzie.

Card - B 443.
X Ray - D 20

Accident :- On 23rd July, 1910, a large stone fell on his left wrist, while he was working in the pit.

X Ray :- Comminuted fracture of lower third of Radius, implicating the wrist joint. In the negative the semilunar appears fissured transversely.

Treatment :- Wool, bandage, sling.
Massage and movement commenced nine days later.
He only attended twice for massage.

Report :- 1.4.11.
He continued to rub his arm at home.

Duration off work :- 17 weeks - on compensation.
He felt his arm weak on commencing his work again, and sometimes he feels it even yet.
The appearance of arm is very good.
Flexion at the wrist is complete. Extension is incomplete.
The X Ray 1.4.11 shows good union with practically no displacement.

Remarks :- This is a remarkably good result considering the absence of any special treatment. Doubtless the duration off work would have been much reduced had he continued to attend the S.O.P.D.
Accident: On 4th October, 1910, she fell off a chair and injured her left arm. She was brought to the S.O.P.D., two days later.

X Ray: 6.10.10. Slightly oblique fracture at middle of radius, with very slight outward displacement of the lower fragment.

Treatment: Gutter splint and sling. Massage and movement daily.

Discharged: The mother ceased to bring her to hospital after the 27th October, i.e. three weeks and two days after the accident. There was then firm union and complete range of movement, with an almost inappreciable angling at the site of the fracture.

Number of massage seances - 12.

Report: 11.4.11. The child has never complained of her arm since she left hospital. She has used it quite freely in her play since a week or so after she ceased to attend the S.O.P.D. The very slight angling is still present, but all movements are fully present. The X Rays 11.4.11 shew good union with slight antero posterior bending of the radius.
A. W. Ritchie, 25.

Sanitary Inspector,

23 Forrest Road, Edinburgh.

Card - E 6074.

X Rays - E 190 F 51.

Accident: On 28th December, 1910 he was thrown out of a dogcart and landed on his left hand. He felt the shock transmitted to his elbow joint and referred all his pain there. He was seen by a doctor and the injury was diagnosed as a bruise. He treated it as such for a week and then came to the S.O.P.D. on the 4th January, 1911 because of the continued pain and stiffness. He still referred all his pain to the left elbow joint, which was therefore X Rayed.

X Ray: 4.1.11 shows chipping of the Internal Epicondyle without displacement.

Treatment: Massage and movement.

Progress: He rapidly improved under the massage, but on the 24th January the masseur drew attention to a grating the patient felt in the middle of his arm on flexing and extending his fingers.

This was easily interpreted as the rubbing of the tendons over the callus uniting a hitherto undiagnosed fracture at the middle of the radius.

X Rays: 24.1.11 - four weeks after accident - show a healed transverse fracture in the middle of the radius, with some inward and backward displacement of the upper fragment. The callus is plentiful.

Remarks: It is remarkable that this fracture should have remained undiagnosed so long. No doubt all who examined him were led astray by his referring all his discomfort to the elbow joint.
Discharged: 1st. February, 1911 - five weeks after the accident. 
There was then firm union and movements full, free and of sufficient power. 
Number of massage seances - 15.

Duration off work: He continued at his work all the time, but has no hard manual work to do.

Report: 14.4.11. The arm scarcely ever troubles him. Sometimes there is a soreness at the wrist if he does too much manual work.
Appearance and movements are excellent.

X Rays: 14.4.11. Show firm union with slight inward and backward displacement of the upper fragment still persisting.

Remarks: Had this fracture been diagnosed at once, it is possible that perfect alignment of the fragments would have been secured.

joint. Whether or not displacement was present from the first it is impossible to tell, but there is a possibility of the displacement having occurred later from too much freedom on the patient's and masseur's part. He was never off work and never had a splint on, which he would have had if the fracture had been diagnosed. More care would also have been taken in the massage and movement.
John Daly, 45.
Miner,
270 High Street, Portobello.

Accident :- On 23rd December, 1910 his forearm was caught in a
trap door. His doctor treated the injury as a
bruise by bathing in hot water and rubbing.
A bandage was applied.
He was four weeks off work and on compensation.
The arm felt weak when he started work. About two
weeks later he bruised the same arm and came to the
S.O.P.D., Royal Infirmary, Edinburgh, on the 11th February,
1911.

Condition on 11th February, 1911 - seven weeks after first accident -
the appearance of the arm was unaltered; all movements
were fully present; thickening was felt over the sub-
cutaneous border of the ulna below its middle. A healed
fracture of the ulna was diagnosed.

X Ray :- 11.2.11. Healed fracture at middle of ulna. The fragments
are in excellent position and there is no excess of callus.

Treatment :- He attended twice for massage and was dismissed on the 15th
February, 1911.

Report :- 26.3.11. He started work again two days after his discharge.
The arm never troubles him now, is as strong as it used to
be. Appearance and movements are excellent.

Remarks :- This is one of the fairly numerous cases of simple fracture
without displacement that are diagnosed as a bad bruise and
treated as such. Perhaps the mistaken diagnosis is a
blessing in disguise, as it obviates the inconveniences that
result from the immobilisation commonly employed in treating
all fractures.