

Digitized by the Internet Archive
in 2010 with funding from
University of Toronto



P
Med
P

TRANSACTIONS

OF THE

PATHOLOGICAL SOCIETY OF LONDON.

VOLUME TWELFTH.

COMPRISING THE REPORT OF THE PROCEEDINGS FOR
THE SESSION 1860-61.

LONDON :

PRINTED FOR THE SOCIETY BY J. W. ROCHE, 5, KIRBY STREET.

1861.

RB
1
P4
V. 12

THE present publication, being the Twelfth Volume of Transactions, constitutes the Fifteenth published Annual Report of the Pathological Society's proceedings.

The COUNCIL think it right to repeat, that the exhibitors are alone responsible for the descriptions given of the Specimens exhibited by them, the only change made in the Reports furnished by the authors being such verbal alterations as were absolutely necessary.

53, BERNERS STREET, OXFORD STREET,
September, 1861.

7646

TABLE OF CONTENTS

OF VOLUME XII.

LIST OF PRESIDENTS AND OF OFFICERS AND MEMBERS DURING THE SESSION 1860-61	I
LIST OF SPECIMENS EXHIBITED DURING THE SESSION 1860-61 .	XIX
LIST OF PLATES	XXXVIII
LIST OF WOODCUTS	XXXIX
DISEASES, ETC., OF THE NERVOUS SYSTEM	1
DISEASES, ETC., OF THE ORGANS OF RESPIRATION	36
DISEASES, ETC., OF THE ORGANS OF CIRCULATION	59
DISEASES, ETC., OF THE ORGANS OF DIGESTION	84
DISEASES, ETC., OF THE GENITO-URINARY ORGANS	131
DISEASES, ETC., OF THE OSSEOUS SYSTEM	159
DISEASES, ETC., OF THE ORGANS OF SPECIAL SENSE	201
TUMOURS, CYSTS, ETC.	203
DISEASES, ETC., OF THE DUCTLESS GLANDS	224
MISCELLANEOUS SPECIMENS, INCLUDING MALFORMATIONS OF EX- TERNAL PARTS, DISEASES OF THE SKIN, DIPHTHERIA, ETC. .	234
SPECIMENS FROM THE LOWER ANIMALS	242
INDEX	247

Former Presidents.

ELECTED

- 1846 CHARLES J. B. WILLIAMS, M.D., F.R.S.
1848 CHARLES ASTON KEY, Esq.
1850 PETER MERE LATHAM, M.D.
1852 CÆSAR H. HAWKINS, Esq., F.R.S.
1853 BENJAMIN GUY BABINGTON, M.D., F.R.S.
1855 JAMES MONCRIEFF ARNOTT, Esq., F.R.S.
1857 THOMAS WATSON, M.D., F.R.S.
1859 WILLIAM FERGUSSON, Esq., F.R.S.

OFFICERS AND COUNCIL

OF THE

Pathological Society of London,

ELECTED AT

THE GENERAL MEETING, JANUARY 1, 1861.

President.

JAMES COPLAND, M.D., F.R.S.

Vice-Presidents.

GEORGE HILARO BARLOW, M.D.
SIR JOHN LIDDELL, M.D., C.B., F.R.S.
THOMAS WATSON, M.D., F.R.S.
C. J. B. WILLIAMS, M.D., F.R.S.
JOHN BIRKETT, Esq.
JAMES DIXON, Esq.
WILLIAM FERGUSSON, Esq., F.R.S.
ALEXANDER SHAW, Esq.

Treasurer.

RICHARD QUAIN, M.D.

Council.

A. WHYTE BARCLAY, M.D.	THOMAS BALLARD, Esq.
THOMAS A. BARKER, M.D.	W. WHITE COOPER, Esq.
WILLIAM D. CHOWNE, M.D.	J. GREGORY FORBES, Esq.
WILLIAM O. MARKHAM, M.D.	JABEZ HOGG, Esq.
CHARLES MURCHISON, M.D.	J. CHARLES LANGMORE, Esq.
JOHN W. OGLE, M.D.	HENRY LEE, Esq.
THOS. BEVILL PEACOCK, M.D.	JOHN MARSHALL, Esq., F.R.S.
HENRY HYDE SALTER, M.D., F.R.S.	JOHN JAMES PURNELL, Esq.
EDWARD C. SEATON, M.D.	JOHN PYLE, Esq.
ROBERT HUNTER SEMPLE, M.D.	SAMUEL JAMES A. SALTER, Esq.

Honorary Secretaries.

JOHN S. BRISTOWE, M.D. | HENRY THOMPSON, Esq.

Trustees.

THOS. BEVILL PEACOCK, M.D. | RICHARD QUAIN, M.D.
GEORGE POLLOCK, Esq. b



* * * *Members are requested to indicate to the Secretaries corrections when necessary.*

LIST OF MEMBERS OF THE SOCIETY.

Honorary Members.

- ANDRAL, G., M.D., Professor in the Faculty of Medicine, Paris.
CRUVEILHIER, J. C., M.D., Professor in the Faculty of Medicine, Paris.
HENLE, J., Professor of Anatomy and Physiology in the University of Zurich.
ROKITANSKY, CARL, M.D., Professor of Pathological Anatomy in the University of Vienna.
STOKES, WILLIAM, M.D., LL.D., F.R.S., M.R.I.A., Regius Professor of Physic in the University of Dublin, Physician in Ordinary to the Queen in Ireland.
VOGEL, JULIUS, M.D., Professor of Clinical Medicine in the University of Giessen.
-

Resident and Non-Resident Members.

- (C.) Present Members of Council. * Former Members of Council.
† Have paid Composition Fee for Annual Subscriptions. ‡ Have paid Composition Fee for Transactions.
-

GENERAL LIST OF MEMBERS.

Elected Session

- 1858-59 Acland, Henry Wentworth, M.D., F.R.S., Physician to the Radcliffe Infirmary, Oxford.
* *Orig. Memb.* Adams, William, Esq., Surgeon to the Royal Orthopædic Hospital, 5, Henrietta-street, Cavendish-square.
1858-59 Adams, William, Esq., 37, Harrington-square.
1847-48 Aikin, Charles A., Esq., 7, Clifton-place, Sussex-square, Hyde-park.
1857-58 Alison, S. Scott, M.D., Physician to the Hospital for Consumption, Brompton, 80, Park-street, Grosvenor-square.
1859-60 Andrew, Edwyn, M.D., Resident Medical Officer, University College Hospital, Gower-street.
1857-58 Anstie, Francis E., M.D., Assistant-Physician to the Westminster Hospital, 15, Onslow-square, Brompton.
* *Orig. Memb.* Arnott, James Moncrieff, Esq., F.R.S. (formerly President), 2, New Burlington-street.
1851-52 Ashton, T. J., Esq., 31, Cavendish-square.

Elected Session

1857-58 A vent, Nicholas, Esq., Modbury, Devonshire.

- **Orig. Memb.* Babington, Benjamin Guy, M.D., F.R.S. (formerly President),
31, George-street, Hanover-square.
- 1854-55 Babington, C. Metcalfe Stuart, F.R.C.P., Physician-Accoucheur to
Queen Charlotte's Lying-in-Hospital, 29, Hertford-street, May-
fair.
- 1856-57 Balding, Daniel Barley, Esq., Royston, Herts.
- 1849-50 Ballard, Thomas, Esq. (C.), 10, Southwick-place, Hyde-park.
- 1851-52 Barclay, A. Whyte, M.D. (C.), Assistant-Physician to St. George's
Hospital, 23A, Bruton-street, Berkeley-square.
- 1860-61 Barker, Edgar, Esq., Jun., 5, Albion-place, Hyde-park.
- 1855-56 Barker, T. A., M.D. (C.), Senior Physician to St. Thomas's Hospital,
71, Grosvenor-street.
- Orig. Memb.* Barker, Thomas Herbert, M.D., Harpur-place, Bedford.
- **Orig. Memb.* Barlow, George Hilario, M.D. (V.P.), Physician to Guy's Hospital,
5, Union-street, Southwark.
- 1852-53 Bartlett, William, Esq., Surgeon to the Kensington Dispensary, Lad-
broke Lodge, Ladbroke-square, Notting-hill.
- 1852-53 Barwell, Richard, Esq., Assistant-Surgeon to the Charing Cross Hos-
pital, 22, Old Burlington-street.
- 1857-58 Basham, William R., M.D., Senior Physician to the Westminster
Hospital, 17, Chester-street, Grosvenor-place.
- *1851-52 Beale, Lionel S., M.B., F.R.S., Physician to King's College Hospital,
61, Grosvenor-Street.
- 1855-56 Bealey, Adam, M.D., M.A., 27, Tavistock-square.
- 1852-53 Beck, Thomas Snow, M.D., F.R.S., 9A, Langham-place.
- *1849-50 Beith, Robert, M.D., Deputy Inspector-General of Jamaica Hospitals.
- 1846-47 Bennet, James Henry, M.D., Physician-Accoucheur to the Royal Free
Hospital, Weybridge, Surrey.
- **Orig. Memb.* Bennett, James Risdon, M.D. (formerly V.P.), Physician to St.
Thomas's Hospital and to the City of London Hospital for Diseases
of the Chest, 15, Finsbury-square.
- †1856-57 Bickersteth, Edward R., Esq., Surgeon to the Liverpool Royal Infirmary,
2, Rodney-street, Liverpool.
- *1848-49 Bird, James, M.D., Lecturer on Military Surgery at St. Mary's Hospi-
tal, 27, Hyde-park-square.
- 1855-56 Bird, W., Esq., Surgeon to the West of London Hospital and the St.
George's and St. James's Dispensary, 11, George Street, Hanover-
square.
- *1849-50 Birkett, Edmund Lloyd, M.D., Physician to the City of London Hos-
pital for Diseases of the Chest, 48, Russell-square.
- **Orig. Memb.* Birkett, John, Esq., (V.P.), Surgeon to Guy's Hospital, 59, Green-
street, Grosvenor-square.
- 1853-54 Black, Cornelius, M.D., Physician to the Chesterfield Dispensary, St.
Mary's-gate, Chesterfield.

Elected Session

- 1849-50 Blagden, Robert, Esq., Stroud, Gloucestershire.
- 1859-60 Bloomenthal, Theodore, Esq., 13, Dorset-terrace, Clapham-road.
- 1855-56 Borham, W. H., Esq., 19, Cambridge-terrace, Hyde-park.
- *1850-51 Bowman, William, Esq., F.R.S., Surgeon to King's College Hospital, and to the Royal Ophthalmic Hospital, 5, Clifford-street.
- *1846-47 Brinton, William, M.D., Physician to St. Thomas's Hospital, 20, Brook-street, Grosvenor-square.
- 1856-57 Briscoe, John, Esq., 12, Broad-street, Oxford.
- *†1850-51 Bristowe, John S., M.D. (Hon. Secretary), Physician to St. Thomas's Hospital, 3, St. Thomas's-street, Southwark.
- 1859-60 Broadbent, William Henry, M.B., Lond., Assistant-Physician to the London Fever Hospital, 23, Upper Seymour-street, Portman-square.
- 1851-52 Brodhurst, Bernard E., Esq., Assistant-Surgeon to the Royal Orthopædic Hospital, 20, Grosvenor-street.
- *1846-47 Brooke, Charles, M.B., F.R.S., Surgeon to the Westminster Hospital, 16, Fitzroy-square.
- **Orig. Memb.* Browne, Joseph Hullett, M.D., Physician to the St. Pancras Royal General Dispensary, 55, Gordon-square.
- 1854-55 Browne, Robert Cave, M.D., Trinder-house, Barnet, Herts.
- 1859-60 Browning, Charles, Esq., 13A, Portsdown-road, Maida-hill.
- 1859-60 Browning, George, M.D., 10, St. Stephen's-crescent, Westbourne-park.
- 1855-56 Bryant, T., Esq., Assistant-Surgeon to Guy's Hospital, 2, Finsbury-square.
- 1854-55 Buchanan, George, M.D., Assistant-Physician to the London Fever Hospital, and to the Hospital for Sick Children, 75, Gower-street, Bedford-square.
- 1858-59 Buckland, Francis, Esq., Surgeon to the 2nd Regiment of Life Guards, Windsor.
- 1858-59 Budd, George, M.D., F.R.S., Physician to King's College Hospital, 20, Dover-street, Piccadilly.
- 1850-51 Bullock, Henry, Esq., 61, Cumberland-street, Bryanston-square.
- 1859-60 Burton, Alfred, Esq., 13, Dover-street, Piccadilly.
- 1852-53 Burton, John M., Esq., Lee-park, Blackheath.
- **Orig. Memb.* Busk, George, Esq., F.R.S. (late V.P.), Surgeon to the Seamen's Hospital-ship, "Dreadnought," 15, Harley-street, Cavendish-square.
- *1856-57 Buzzard, Thomas, M.B., 41, Great Marlborough-street.
- 1856-57 Callender, G. W., Esq., Assistant-Surgeon to St. Bartholomew's Hospital, 47, Queen Anne-street, Cavendish-square.
- †**Orig. Memb.* Camps, William, M.D., 40, Park-street, Grosvenor-square.
- *1849-50 Canton, Edwin, Esq., Surgeon to the Charing Cross Hospital, 30, Montague-place, Russell-square.
- 1854-55 Carpenter, Alfred, Esq., M.D., High-street, Croydon.

Elected Session

- 1848-49 Carpenter, William Guest, Esq., Amersham, Bucks.
- 1855-56 Carter, H. V., M.D., Professor of Anatomy and Physiology, Grant Medical College, Bombay.
- *1848-49 Chalk, William Oliver, Esq., 3, Nottingham-terrace, Regent's-park.
- **Orig. Memb.* Chevers, Norman, M.D., India.
- †1858-59 Child, Gilbert W., M.D., Physician to the Radcliffe Infirmary, 61, St. Giles', Oxford.
- 1851-52 Childs, George Borlase, Esq., Surgeon to the Metropolitan Free Hospital, and to the City Police Force, 11, Finsbury-place, South.
- 1854-55 Cholmeley, William, M.D., Physician to the Great Northern Hospital, 40, Russell-square.
- 1851-52 Chowne, William D., M.D. (C.), Physician to the Charing Cross Hospital, 8, Connaught-place West, Hyde-park.
- 1860-61 Clapton, Edward, M.D., Wellington-street, London-bridge.
- 1853-54 Clark, Andrew, M.D., Assistant-Physician to the London Hospital, 23, Montague-place, Russell-square.
- 1849-50 Clarke, John, Esq., L.R.C.P., Physician-Accoucheur to the British Lying-in Hospital, 42, Hertford-street, May-fair.
- 1854-55 Clover, J. Thomas, Esq., 3, Cavendish-place.
- **Orig. Memb.* Cock, Edward, Esq., Surgeon to Guy's Hospital, 13, St. Thomas's-street, Borough.
- 1857-58 Cockerton, Richard, Esq., Surgeon to the Kensington Dispensary, 12, Petersham-terrace, Gloucester-road, South Kensington.
- 1855-56 Cockle, John, M.D., M.A., Physician to the Royal Free Hospital, 63, Brook-street, Hanover-square.
- Orig. Memb.* Cohen, Daniel Whitaker, M.D.
- 1858-59 Cooke, Robert Thomas, Esq., Surgeon to the Scarborough Dispensary, 15, St. Nicholas Cliff, Scarborough, Yorkshire.
- 1849-50 Cooper, George F., M.D., Surgeon to the Brentford Dispensary, Brentford.
- 1850-51 Cooper, William White, Esq. (C.), Ophthalmic Surgeon to St. Mary's Hospital, and Surgeon to the North London Eye Infirmary, 19, Berkeley-square.
- **Orig. Memb.* Copland, James, M.D., F.R.S. (President), Consulting-Physician to the Royal Infirmary for Children, 5, Old Burlington-street.
- 1853-54 Cornish, William Robert, Esq.
- 1858-59 Coulson, Walter J., Esq., Assistant-Surgeon to the Lock Hospital, Frederick's-place, Old Jewry.
- **Orig. Memb.* Coulson, William, Esq., Senior Surgeon to St. Mary's Hospital, 1, Chester-terrace, Regent's-park.
- 1852-53 Cousins, Edward, Esq., 49, Camden-road-villas, Camden-town.
- **Orig. Memb.* Crisp, Edwards, M.D., 278, King's-road, Chelsea.
- *1848-49 Critchett, George, Esq. (formerly Honorary Secretary), Surgeon to the London Hospital, and Surgeon to the Royal London Ophthalmic Hospital, Moorfields, 46, Finsbury-square.

Elected Session

- 1855-56 Croft, John, Esq., Surgeon to the Surrey Dispensary, 4, St. Thomas's-street, Southwark.
- 1860-61 Crosby, Thomas Boor, Esq., 23, Finsbury-place.
- 1853-54 Cross, Robert, M.D., Physician to the Brewer's-court Dispensary, 20, New-street, Spring-gardens.
- 1857-58 Cumberbatch, Laurence T., Esq., 25, Cadogan - place, Sloane-street.
- 1854-55 Curgenvin, J. Brendon, Esq., 11, Craven - hill - gardens, Bayswater.
- *1854-55 Curling, Thomas Blizard, Esq., F.R.S., Surgeon to the London Hospital, and Examiner in Surgery at the University of London, 39, Grosvenor-street.
- 1854-55 Daubeny, Henry, M.D.
- **Orig. Memb.* Davics, Herbert, M.D., Consulting - Physician to the Infirmary for Asthma, &c., and Physician to the London Hospital, 23, Finsbury-square.
- *1846-47 Davis, John Hall, M.D., Physician to the Royal Maternity Charity, 11, Harley-street, Cavendish-square.
- 1859-60 Davis, Francis William, Esq., R.N., 11 and 12, Love-lane, Aldermanbury.
- **Orig. Memb.* Day, George E., M.D., F.R.S., Chandos Professor of Anatomy in the University of St. Andrews.
- 1857-58 Delima, Teofilo, M.D., Caracas, South America.
- 1851-52 Devenish, Samuel Weston, M.B., 7, Billiter-square.
- 1855-56 Dick, H., M.D., 59, Wimpole-street, Cavendish-square.
- 1858-59 Dickinson, W. H., M.B., Demonstrator of Anatomy at St. George's Hospital, and Assistant-Physician to the Hospital for Sick Children, 11, Chesterfield-street, May-fair.
- **Orig. Memb.* Dixon, James, Esq. (V.P.), Surgeon to the Royal London Ophthalmic Hospital, Moorfields, 2, Portman-square.
- 1855-56 Druitt, R., L.R.C.P., Medical Officer of Health for St. George's, Hanover-square, 37, Hertford--treet, May-fair.
- 1851-52 Drury, James Samuel, M.D., 13, Radnor-place, Hyde-park.
- 1846-47 Dudgeon, Robert E., M.D., 82, Gloucester-place, Portman-square.
- 1851-52 Duff, George, M.D., High-street, Elgin.
- 1860-61 Dunn, Robert William, Esq., 32, Clarges-street, Piccadilly.
- 1858-59 Durham, Arthur Edward, Esq., Demonstrator of Anatomy at Guy's Hospital, 43, Trinity-square, Southwark.
- 1848-49 Eden, Thomas E., Esq., Surgeon-Dentist to the Farringdon General Dispensary, 45, Threadneedle-street.
- 1854-55 Edwards, George N., M.D., Assistant-Physician to St. Bartholomew's Hospital, and to the City of London Hospital for Diseases of the Chest, 1, Finsbury-square.
- 1846-47 Ellis, Joseph, Esq., Sudbrook-park, Richmond, Surrey.

Elected Session

- *1846-47 Erichsen, John, Esq., Surgeon to University College Hospital, 6, Cavendish-place, Cavendish-square.
- 1853-54 Evans, Conway, M.D., Assistant-Physician to King's College Hospital, and Physician to the Public Dispensary, Lincoln's-inn, 30, Brook-street, Grosvenor-square.
- ‡1858-59 Ewens, John, Esq., Milton-Abbas, Blandford, Dorset.
- *1847-48 Fergusson, William, Esq., F.R.S. (V.P., late President), Surgeon to King's College Hospital, 16, George-street, Hanover-Square.
- *1846-47 Fincham, George T., M.D., Physician to the Westminster Hospital, 2, Eccleston-terrace South, Eccleston-square.
- 1853-54 Fisher, W. Webster, M.D., Downing Professor of Medicine, Cambridge.
- 1859-60 Fisher, Alexander, M.D., Assistant-Surgeon, R.N., Her Majesty's ship "Dragon," Chatham.
- 1855-56 Flower, William H., Esq., Assistant-Surgeon to the Middlesex Hospital, 32, Queen Anne-street, Cavendish-square.
- 1851-52 Forbes, J. Gregory, Esq. (C.), Surgeon to the Metropolitan Convalescent Institution, 9, Devonport-street, Hyde-park.
- 1849-50 Foreman, Robert Clifton, M.D., Resident Physician to the Asylum for Imbecile Children of the Upper Classes, Church-hill House, Brighton.
- *†*Orig. Memb.* Forster, John Cooper, Esq., Assistant-Surgeon to Guy's Hospital, Surgeon to the Royal Infirmary for Children, 11, Wellington-street, Southwark.
- 1859-60 Foster, Michael, M.D., Curator of the Pathological Museum, University College.
- 1858-59 Francis, Charles Richard, M.B., Bengal Medical Establishment, Indian Army.
- 1853-54 Freeman, William Henry, Esq., 21, Spring-gardens.
- Orig. Memb.* Frere, J. C., Esq., Trinity College, Cambridge.
- *1846-47 Fuller, Henry W., M.D., Physician to St. George's Hospital, 13, Manchester-square.
- ‡1858-59 Gairdner, William Tennant, M.D., Physician to the Royal Infirmary, 52, Northumberland-street, Edinburgh.
- 1860-61 Galton, Robert Cameron, M.B., Camb., 48, Harley-street.
- 1855-56 Gamgee, Joseph Sampson, Esq., Surgeon to the Queen's Hospital, Birmingham, 20, Broad-street, Birmingham.
- 1855-56 Gamgee, J., Esq., New Veterinary College, Edinburgh.
- 1850-51 Garrett, Mark Brown, Esq., 3, New-road, St. George's East.
- *1846-47 Garrod, Alfred Baring, M.D., F.R.S., Physician to University College Hospital, 84, Harley-street, Cavendish-square.
- 1858-59 Gascoyen, George Green, Esq., Assistant-Surgeon to the Lock Hospital, and Lecturer on Anatomy at St. Mary's Hospital, 25, Oxford-terrace, Hyde-park.
- 1855-56 Gaskoin, George, Esq., 3, Westbourne-park, Paddington.

Elected Session

- **Orig. Memb.* Gay, John, Esq., Senior Surgeon to the Great Northern Hospital, King's-cross, 10, Finsbury-place South.
- 1854-55 Gibb, George Duncan, M.D., F.G.S., Physician to the West London Dispensary, 19A, Portman-street, Portman-square.
- 1853-54 Gibbon, Septimus, M.D., 3, Finsbury-square.
- †1857-58 Godfrey, Benjamin, M.D., Carlton-house, Enfield.
- 1854-55 Goodfellow, Stephen Jennings, M.D., Physician to the Middlesex Hospital, 5, Savile-row, Burlington-gardens.
- 1856-57 Goolden, R. H., M.D., Physician to St. Thomas's Hospital, 41, Sussex-gardens, Hyde-park.
- 1857-58 Gowlland, Peter Y., Esq., Assistant-Surgeon to the London Hospital, 34, Finsbury-square.
- 1846-47 Gream, George T., M.D., 2, Upper Brook-street, Grosvenor-square.
- 1856-57 Greenhalgh, Robert, M.D., Physician to the Samaritan Free Hospital for Women and Children, Consulting Physician-Accoucheur to St. John's Wood Dispensary, 76, Grosvenor-street.
- †1854-55 Greenhill, William Alexander, M.D., Physician to the Hastings Infirmary, Carlisle-parade, Hastings.
- 1860-61 Guencau de Mussy, Henri, M.D., 4, Cavendish-place, Regent-street.
- 1858-59 Gunn, Theophilus Miller, Esq., 40, York-place, Portman-square.
- 1851-52 Hacon, E. Dennis, Esq., Mare-street, Hackney.
- †1851-52 Halley, Alexander, M.D., 7, Harley-street, Cavendish-square.
- 1851-52 Hansard, Richard James, Esq., Surgeon to the Radcliffe Infirmary, 5, Broad-street, Oxford.
- *1847-48 Hare, Charles John, M.D., Physician to University College Hospital, 41, Brook-street, Grosvenor-square.
- †1855-56 Harley, George, M.D., Professor of Medical Jurisprudence in University College, London, 77, Harley-street.
- 1859-60 Harris, Francis, M.D., Assistant-Physician to St. Bartholomew's Hospital, and to the Hospital for Sick Children, 24, Cavendish-square.
- †1857-58 Hart, Ernest, Esq., Junior Surgeon to the North London Ophthalmic Infirmary, 69, Wimpole-street.
- †1859-60 Hastings, Cecil William, M.B., Demonstrator of Anatomy at St. George's Hospital, 7, Hertford-street, May-fair.
- **Orig. Memb.* Hawkins, Caesar H., Esq., F.R.S. (formerly President), Consulting-Surgeon to St. George's Hospital, 26, Grosvenor-street.
- 1856-57 Hawksley, Thos., M.D., Physician to the Margaret-street Dispensary for Consumption, 26, George-street, Hanover-square.
- 1856-57 Heath, Christopher, Esq., Demonstrator of Anatomy at the Westminster Hospital, 31, Sackville-street, Piccadilly.
- 1858-59 Henderson, Andrew, Esq., 14, Upper Seymour-street, Portman-square.
- *1848-49 Henry, Mitchell, Esq. (formerly Hon. Secretary), Surgeon to the Middlesex Hospital, and to the North London Eye Infirmary, 5, Harley-street, Cavendish-square.

Elected Session

- **Orig. Memb.* Hewett, Prescott G., Esq. (formerly V.P.), Surgeon to St. George's Hospital, 1, Chesterfield-street, May-fair.
- 1854-55 Hewitt, Graily, M.D., Physician to the British Lying-in-Hospital, and Lecturer on Midwifery and Diseases of Children at St. Mary's Hospital, 36, Berkeley-square.
- 1859-60 Hill, Matthew Berkeley, M.B., Lond., Heath-house, Stapleton, Bristol.
- 1854-55 Hillier, Thomas, M.D., Medical Officer of Health for St. Pancras, 21, Upper Gower-street, Bedford-square.
- **Orig. Memb.* Hillman, William Augustus, Esq., Senior Assistant-Surgeon to the Westminster Hospital, 1, Argyll-street, Regent-street.
- **Orig. Memb.* Hilton, John, Esq., F.R.S., Surgeon to Gny's Hospital, 10 New Broad-street, City.
- 1855-56 Hinton, J., Esq., 9, Philip-terrace, Tottenham.
- *1850-51 Hodgson, Joseph, Esq., F.R.S., 60, Westbourne-terrace.
- 1852-53 Hogg, Jabez, Esq. (C.), Assistant-Surgeon to the Westminster Ophthalmic Hospital, 1, Bedford-square.
- 1846-47 Holman, H. Martin, M.D., Hurstpierpoint, Sussex.
- 1854-55 Holmes, Timothy, Esq., Assistant-surgeon to St. George's Hospital, and Surgeon to the North London Eye Infirmary, 22, Queen-street, May-fair.
- *1849-50 Holt, Barnard Wight, Esq., Senior Surgeon to the Westminster Hospital, 14, Savile-row.
- 1853-54 Hood, William Charles, M.D., Resident Physician, Bethlem Hospital.
- 1858-59 Hooper, W., Esq., Resident Assistant Obstetric Officer at St. George's Hospital.
- 1850-51 Hore, Henry A., Esq., Surgeon to the Bristol Royal Infirmary, 31, Park-street, Bristol.
- 1857-58 Hornidge, Thomas King, Esq., 15, Charles-street, Westbourne-terrace.
- †1855-56 Hudson, John, M.D., 11, Cork-street.
- 1854-55 Hulke, John Whitaker, Esq., Assistant-Surgeon to King's College Hospital, 10, Old Burlington-street.
- 1854-55 Hulme, Edward Charles, Esq., Surgeon to the Central London Ophthalmic Hospital, 19, Gower-street, Bedford-square.
- 1852-53 Humby, Edwin, Esq., 83, Hamilton-terrace, St. John's-wood.
- *1852-53 Hutchinson, Jonathan, Esq., Assistant-Surgeon to the London Hospital, and Surgeon to the Metropolitan Free Hospital, 4, Finsbury-circus.
- 1860-61 Ingram, Charles, M.D., Physician to the Royal General Dispensary, Aldersgate, 87, Guildford-street, Russell-square.
- †1856-57 Jackson, Henry, Esq., Senior Surgeon to the Sheffield Infirmary, St. James's-row, Sheffield.
- 1859-60 Jackson, Thomas Carr, Esq., Surgeon to the Great Northern Hospital, 3, Weymouth-street, Portland-place.

Elected Session

- †1853-54 Jardine, John Lee, Esq., Capel, near Dorking, Surrey.
 1846-47 Jay, Edward, Esq., 51, Park-street, Grosvenor-square.
- **Orig. Memb.* Jeaffreson, Henry, M.D. (formerly V.P.), Physician to St. Bartholomew's Hospital, and Consulting Physician to the City of London Hospital for Diseases of the Chest, 8, Finsbury-square.
- **Orig. Memb.* Jenner, William, M.D., Physician to the Hospital for Sick Children, and to University College Hospital, 8, Harley-street.
- 1854-55 Johnson, Athol A. W., Esq., Surgeon to the Hospital for Sick Children, 37, Albemarle-street.
- 1854-55 Johnson, Edward, M.D., 19, Cavendish-place, Cavendish-square.
- **Orig. Memb.* Johnson, George, M.D., Physician to King's College Hospital, 11, Savile-row.
- *1846-47 Johnson, Henry Charles, Esq., Surgeon to St. George's Hospital, 6, Savile-row.
- *†*Orig. Memb.* Jones, Henry Bence, M.D., F.R.S. (formerly V.P.), Physician to St. George's Hospital, 31, Brook-street, Grosvenor-square.
- 1853-54 Jones, Sydney, M.B., Assistant-Surgeon to St. Thomas's Hospital, 15, St. Thomas's-street.
- 1858-59 Jones, William Price, M.D., Surbiton, Kingston.
- 1859-60 Jones, Walter, Esq., College-yard, Worcester.
- 1846-47 Kent, Thomas J., Esq., Parthenon Club, 16, Regent-street.
- 1852-53 Kershaw, W. Wayland, M.D., Kingston-on-Thames.
- 1859-60 Kiallmark, Henry Walter, Esq., 46, Princes-square, Westbourne-grove.
- 1851-52 Kingdon, J. Abernethy, Esq., Surgeon to the City Dispensary, and to the City of London Truss Society, 2, New Bank-buildings.
- †1856-57 Kingsley, Henry, M.D., Physician to the Stratford Infirmary, Stratford-on-Avon, Warwickshire.
- 1854-55 Kirby, Edmund A., M.D., 1, Taviton-street, Gordon-square.
- 1854-55 Kirkes, William Senhouse, M.D., Assistant-Physician to St. Bartholomew's Hospital, 2, Lower Seymour-street.
- 1850-51 Langmore, John C., M.B., (C.), 20, Oxford-terrace, Hyde-park.
- 1857-58 Lankester, Edwin, M.D., F.R.S., Medical Officer of Health for St. James's, Westminster, 8, Savile-row.
- *1849-50 Latham, Peter Mere, M.D. (formerly President), late Physician to St. Bartholomew's Hospital, 36, Grosvenor-street.
- 1856-57 Laurence, John Z., Esq., Surgeon to the St. Marylebone General Dispensary, 30, Devonshire-street, Portland-Place.
- 1853-54 Lawrence, Henry John Hughes, Esq., Assistant-Surgeon, Grenadier Guards.
- 1858-59 Lawson, George, Esq., Surgeon to the Great Northern Hospital, 63, Park-street, Grosvenor-square.
- 1857-58 Leared, Arthur, M.B., Physician to the Royal Infirmary for Diseases of the Chest, 12, Old Burlington-street.

Elected Session

- 1851-52 Lce, Henry, Esq. (C.), Assistant-surgeon to St. George's Hospital, and Senior Surgeon to the Lock Hospital, 9, Savile-row.
- 1852-53 Leggatt, Alfred, Esq., 13, William-street, Lowndes-square.
- *1849-50 Liddell, Sir John, C.B., M.D., F.R.S. (V.P.), Director-General of the Medical Department of the Navy, 72, Chester-square, Belgravia.
- *1848-49 Little, William John, M.D. (formerly V.P.), Physician to the London Hospital, 34, Brook-street, Grosvenor-square.
- **Orig. Memb.* Lloyd, Edward, M.D., Physician to the Royal General Dispensary, 4, Suffolk-place, Pall-mall.
- 1852-53 Lloyd, Eusebius A., Esq., Surgeon to Christ's Hospital, 14, Bedford-row.
- 1860-61 Lund, George, M.D., Madeira.
- 1855-56 Macann, Arthur B., Esq., 22, King-street, Portman-square.
- 1858-59 Mackay, Allan Douglas, M.B., Stony-Stratford, Bucks.
- 1857-58 Marcet, William, M.D., Assistant-Physician to the Westminster Hospital, 4, George Street, Hanover Square.
- 1851-52 Markham, William O., M.D. (C.), Physician to St. Mary's Hospital, 33, Clarges-street, Piccadilly.
- 1846-47 Marshall, John, Esq., F.R.S. (C.), Surgeon to University College Hospital, 10, Savile-row.
- †1860-61 Martin, John, Esq., F.L.S., Cambridge House, Portsmouth, and Keydell, near Horndean, Hants.
- 1856-57 Martin, Robert, M.D., Assistant-Physician to St. Bartholomew's Hospital, 19, Queen Anne-street.
- 1852-53 Martyn, S., M.D., Senior Physician to the Bristol General Hospital, 26, Park-Street, Bristol.
- 1858-59 Martyn, William, Esq., 6, Trevor-terrace, Rutland-gate, Brompton.
- 1860-61 Mason, Francis, Esq., 20, Woburn-square.
- 1858-59 Masters, Maxwell T., Esq., Lecturer on Botany at St. George's Hospital, 32, Rye-lane, Peckham.
- 1858-59 Maunder, C. F., Esq., Assistant-Surgeon to the London Hospital, 29, New Broad-street.
- †1851-52 May, George, Junr., M.B., Surgeon to the Royal Berkshire Hospital, Reading.
- 1857-58 Meller, Charles James, Esq.
- 1859-60 Messer, John Cockburn, M.D., Assistant-Surgeon, R.N., Her Majesty's ship "Edinburgh," Queensferry, N.B.
- 1854-55 Miles, Charles, Esq., 13, Conduit-street West, Hyde-park.
- 1858-59 Montefiore, Nathaniel, Esq., 36, Hyde-park-gardens.
- 1860-61 Montgomery, Edmund, M.D., St. Thomas's Hospital.
- 1846-47 Morgan, John, Esq., 3, Sussex-place, Hyde-park-gardens.
- 1852-53 Moseley, George, Esq., 23, Priory-road, Kilburn.
- 1859-60 Moxon, Walter, M.B., Demonstrator of Anatomy at Guy's Hospital, 18, Belitha-terrace, Barnsbury-park.
- 1854-55 Murchison, Charles, M.D. (C.), Assistant-Physician to the Middlesex Hospital, and Senior Physician to the London Fever Hospital, 79, Wimpole-street.

Elected Session

Mussy, *see* Gueneau de Mussy.

- 1860-61 Nelson, Duckworth John, Esq., 7, Marlborough-road, St. John's-wood.
- 1856-57 Nunn, Thomas William, Esq., Assistant-Surgeon to the Middlesex Hospital, 8, Stratford-place, Oxford-street.
- ‡1858-59 Nunneley, Thomas, Esq., Senior Surgeon to the Leeds Eye and Ear Infirmary, Leeds.
- *1850-51 Obré, Henry, Esq., Surgeon to the St. Marylebone Eye and Ear Institution, 1, Melcombe-place, Dorset-square.
- 1852-53 O'Connor, William, M.D., Physician to the Royal Free Hospital, 30, Upper Montagu-street, Montagu-square.
- *1850-51 Ogle, John W., M.D. (C.), (late Hon. Secretary,) Assistant-Physician to St. George's Hospital, 13, Upper Brook-street, Grosvenor-square.
- ‡1855-56 Oldfield, Edmund, Esq., Boscomb Lodge, Finchley-road.
- 1859-60 Orange, William, Esq., Surrey County Lunatic Asylum, near Tooting.
- 1857-58 Ord, William Miller, M.B., Lecturer on Comparative Anatomy, at St. Thomas's Hospital, Brixton-hill.
- ‡1859-60 Paget, Edward H., Esq., Friar-lane, Leicester.
- 1853-54 Parkinson, George, Esq., 16, Hereford-street, Park-lane.
- 1853-54 Part, James, M.D., 7, Camden-road-villas, Camden-town.
- **Orig. Memb.* Partridge, Richard, Esq., F.R.S. (formerly V.P.), Surgeon to King's College Hospital, 17, New-street, Spring-gardens.
- **Orig. Memb.* Peacock, Thomas Bevil, M.D. (C.), (late V.P. and Hon. Secretary,) Physician to St. Thomas's Hospital, and Physician to the City of London Hospital for Diseases of the Chest, 20, Finsbury-circus.
- 1860-61 Pocock, William, Esq., 1, St. John's-villas, Brixton-road.
- **Orig. Memb.* Poland, Alfred, Esq., Assistant-Surgeon to Guy's, and Surgeon to the Royal London Ophthalmic Hospitals, 10, Bolton-row, Curzon-street, May-fair.
- *1846-47 Pollock, George D., Esq. (formerly Hon. Secretary), Surgeon to St. George's Hospital, 27, Grosvenor-street.
- 1850-51 Pollock, James Edward, M.D., Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, 52, Upper Brook-street.
- 1858-59 Potter, Henry, Esq., 56, Maddox-street, Hanover-square.
- 1854-55 Potts, William, Esq., 12, North Audley-street, Grosvenor-square.
- 1856-57 Price, Peter Charles, Esq., Assistant-Surgeon to King's College Hospital, Surgeon to the Great Northern Hospital, King's-cross, and to the Metropolitan Institution for Scrofulous Children, at Margate, 7, Green-street, Grosvenor-square.
- 1856-57 Priestley, William Overend, M.D., Physician-Accoucheur to the Middlesex Hospital, and to the St. Marylebone Infirmary, 31, Somerset-street, Portman-square.

Elected Session

- †1848-49 Purnell, John James, Esq. (C.), Surgeon to the Royal General Dispensary, Woodlands, Streatham-hill.
- 1850-51 Pyle, John, Esq. (C.), 56, Oxford-terrace, Hyde-park.
- **Orig. Memb.* Quain, Richard, M.D. (Treasurer, formerly Hon. Secretary), Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, 23, Harley-street, Cavendish-square.
- 1859-60 Radcliffe, Charles Bland, M.D., Physician to the Westminster Hospital, 4, Henrietta-street, Cavendish-square.
- 1855-56 Rae, James, Esq., Surgeon, R.N., Haslar Hospital.
- **Orig. Memb.* Ramsbotham, Francis H., M.D. (formerly V.P.), Physician-Accoucheur to the London Hospital, 8, Portman-square.
- 1856-57 Ramskill, J. Spence, M.D., Physician to the National Hospital for the Paralysed and Epileptic, 5, St. Helen's-place, Bishopsgate-street.
- 1847-48 Randall, John, M.D., Medical Officer, St. Marylebone Infirmary, 14, Portman-street, Portman-square.
- 1856-57 Ranke, Henry, M.D., Munich.
- 1846-47 Ray, Edward, Esq., Dulwich.
- 1858-59 Reed, Frederick George, M.D., 46, Hertford-street, May-fair.
- 1854-55 Reynolds, J. Russell, M.D., Assistant-Physician to University College Hospital, 38, Grosvenor-street.
- **Orig. Memb.* Ridge, Joseph, M.D., 39, Dorset-square.
- **Orig. Memb.* Roe, George Hamilton, M.D., Senior Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, 57, Park-street, Grosvenor-square.
- 1855-56 Roberts, John Henry, Esq., 10, Finchley-road, St. John's-wood.
- 1856-57 Robinson, Thomas, M.D., 45, Cumming-street, Pentonville.
- 1859-60 Robinson, Frederick, M.D., Battalion Surgeon, Scots Fusilier Guards, Wellington Barracks.
- 1858-59 Rolleston, George, M.D., 5, Broad-street, Oxford.
- 1851-52 Rooke, H. T., M.D., Surgeon to the Seamen's Hospital-ship, "Dreadnought."
- 1858-59 Rose, Henry Cooper, Esq., High-street, Hampstead.
- 1858-59 Rouse, James, Esq., Assistant-Surgeon to the Royal Ophthalmic Hospital, 56, Maddox-street, Hanover-square.
- 1860-61 Rutter, Joseph, Esq., University College Hospital.
- 1852-53 Salter, Henry Hyde, M.D., F.R.S. (C.), Assistant-Physician to the Charing-cross Hospital, 6, Montague-street, Russell-square.
- 1853-54 Salter, Samuel James A., M.B., (C.) Surgeon-Dentist to Guy's Hospital, 17, New Broad-street, City.
- 1852-53 Sanderson, Hugh James, M.D., Physician to the Hospital for Women, 26, Upper Berkeley-street.

Elected Session

- 1854-55 Sanderson, John Burdon, M.D., Assistant-Physician to the Hospital for Consumption, Medical Officer of Health for Paddington, 9, Gloucester-place, Hyde-park.
- 1857-58 Schulhof, Maurice, M.D., Physician to the Royal General Dispensary, Bartholomew-close, 14, Brook-street.
- 1853-54 Seott, John, Esq., Surgeon to the Hospital for Women, Soho-square, 65, Harley-street, Cavendish-square.
- †1858-59 Scratchley, George, M.D., B.L.S., Member of the University of France; New Orleans, Louisiana, U.S.
- 1846-47 Seaton, Edward C., M.D. (C.), 33, Sloane-street, Knightsbridge.
- 1856-57 Sedgwick, William, Esq., Surgeon to the St. Marylebone Provident Dispensary, 12, Park-place, Upper Baker-street.
- 1852-53 Semple, Robert Hunter, M.D. (C.), Physician to the Northern Dispensary, 8, Torrington-square.
- **Orig. Memb.* Shaw, Alexander, Esq. (V.P., formerly Treasurer), Surgeon to the Middlesex Hospital, 22A, Cavendish-square.
- 1856-57 Shillitoe, Buxton, Esq., Surgeon to the Islington Dispensary, 34, Finsbury-circus.
- 1855-56 Sibley, Septimus W., Esq., Medical Registrar to the Middlesex Hospital, 12, New Burlington-street.
- *1848-49 Sibson, Francis, M.D., F.R.S., Physician to St. Mary's Hospital, 40, Brook-street, Grosvenor-square.
- *1847-48 Sieveking, Edward H., M.D., Physician to St. Mary's Hospital, 17, Manchester-square.
- **Orig. Memb.* Simon, John, Esq., F.R.S. (formerly V.P.), Surgeon to St. Thomas's Hospital, 44, Cumberland-street, Bryanston-square.
- **Orig. Memb.* Smith, Ebenezer Pye, Esq., 7, Billiter-square.
- 1854-55 Smith, Edward, M.D., F.R.S., Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, 16, Queen Anne-street, Cavendish-square.
- 1846-47 Smith, Protheroe, M.D., Physician to the Hospital for Women, 25, Park-street, Grosvenor-square.
- 1851-52 Smith, W. Tyler, M.D., Physician-Accoucheur to St. Mary's Hospital, 7, Upper Grosvenor-street.
- 1855-56 Smith, Spencer, Esq., Surgeon to St. Mary's Hospital, 48, Sussex-gardens, Hyde-park.
- 1856-57 Smith, Thomas, Esq., Surgeon to the Great Northern Hospital, 9, Bedford-row.
- 1854-55 Squire, William, Esq., 6, Orchard-street, Portman-square.
- 1860-61 Squirc, Alexander Balmano, Esq., 12, York-gate, Regent's-park.
- *1847-48 Solly, Samuel, Esq., F.R.S., Surgeon to St. Thomas's Hospital, 18, St. Helen's-place, Bishopsgate-street.
- 1857-58 Stallard, Joshua Harrison, L.R.C.P., 2, Buckingham-villas, Ladbroke-road, Notting-hill.
- *1850-51 Stanley, Edward, Esq., F.R.S. (formerly V.P.), Consulting-Surgeon to St. Bartholomew's Hospital, 23A, Brook-street, Grosvenor-square.

Elected Session

- 1854-55 Stewart, William Edward, Esq., Surgeon to St. Marylebone Provident Dispensary, 12, Weymouth-street, Portland-place.
- †1853-54 Streatfeild, J. F., Esq., Assistant-Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and to the Eye Infirmary in University College Hospital, 15, Upper Brook-street.
- †1850-51 Sutherland, Alexander John, M.D., F.R.S., Consulting-Physician to St. Luke's Hospital, 6, Richmond-terrace, Whitehall.
- 1858-59 Swete, Benjamin L., Esq., Surgeon to the British Orphan Asylum, Clapham-rise, 7, Park-road, Stockwell.
- ‡1856-57 Symonds, Frederick, Esq., Surgeon to the Radcliffe Infirmary, 32, Beaumont-street, Oxford.
- Orig. Memb.* Tamplin, R. W., Esq., Surgeon to the Royal Orthopædic Hospital, 33, Old Burlington-street.
- ‡1855-56 Tapp, W. Denning, Esq., Senior Surgeon to the Dorset County Hospital, Dorchester.
- *1850-51 Tatum, Thomas, Esq., Surgeon to St. George's Hospital, 3, George-street, Hanover-square.
- 1851-52 Taylor, Robert, Esq., Surgeon to the Central London Ophthalmic Hospital, 10, George-street, Hanover-square.
- 1860-61 Teevan, William Frederic, Esq., Surgeon to the Royal South London Dispensary, 25, Duke-street, St. James's.
- 1852-53 Thompson, Henry, Esq. (Honorary Secretary), Consulting-Surgeon to the St. Marylebone Infirmary, and Assistant-Surgeon to University College Hospital, 16, Wimpole-street, Cavendish-square.
- 1856-57 Tomes, J., Esq., F.R.S., Surgeon-Dentist to the Middlesex Hospital, 37, Cavendish-square.
- **Orig. Memb.* Toynbee, Joseph, Esq., F.R.S., Aural Surgeon to St. Mary's Hospital, 18, Savile-row.
- 1851-52 Trotter, John W., Esq., Assistant-Surgeon, Coldstream Guards.
- 1859-60 Truman, Edwin Thomas, Esq., Surgeon-Dentist in Ordinary to Her Majesty's Household, 23, Old Burlington-street.
- 1857-58 Tudor, John, Esq.
- *1847-48 Tuke, T. Harrington, M.D., Manor-house, Chiswick.
- 1852-53 Tulloch, James S., M.D., 1, Pembroke-place, Bayswater.
- 1857-58 Turtle, Frederick, Esq., Lamberhurst, Surrey.
- 1856-57 Tyrrell, Walter, Esq., Surgeon to the National Truss Society, 1, St. Helen's-place, Bishopsgate-street.
- 1854-55 Vasey, Charles, Esq., Surgeon-Dentist to St. George's Hospital, 5, Cavendish-place, Cavendish-square.
- 1859-60 Venning, Edgcombe, Esq., House-Surgeon to St. George's Hospital.
- Orig. Memb.* Waite, Charles D., M.D., Senior Physician to the Westminster General Dispensary, 3, Old Burlington-street.
- 1859-60 Walters, John, M.B., Lond.

Elected Session

- **Orig. Memb.* Walton, Henry Haynes, Esq., Surgeon to the Central London Ophthalmic Hospital, and Surgeon to St. Mary's Hospital, 69, Brook-street, Hanover-square.
- †*Orig. Memb.* Ward, Joseph, Esq., Epsom, Surrey.
- *1846-47 Ward, T. Ogier, M.D., Ivy Cottage, Winkfield, near Windsor.
1857-58 Wardell, John Richard, M.D., 4, Belmont, Tunbridge Wells.
1855-56 Watson, Thomas, M.D., F.R.S. (V.P.), Consulting-Physician to King's College Hospital, 16, Henrietta-street, Cavendish-square.
- 1860-61 Way, John, Esq., 13, St. George's-road, Eccleston-square.
1860-61 Wells, John Soelberg, M.D., 12, Old Burlington-street.
1854-55 Webb, Francis Cornelius, M.D., 39, Great Coram-street.
1857-58 Weber, Hermann, M.D., Physician to the German Hospital, 49, Finsbury-square.
- 1853-54 Wells, Thomas Spencer, Esq., Surgeon to the Samaritan Free Hospital for Women and Children, 3, Upper Grosvenor-street.
- *1850-51 West, Charles, M.D., Physician to the Hospital for Sick Children, 61, Wimpole-street, Cavendish-square.
1858-59 White, Frederick, Esq., 20, Oxford-terrace, Hyde-park.
1856-57 Wilkin, Herbert C., Esq., 39, Connaught-terrace, Hyde-park.
- *1854-55 Wilks, Samuel, M.D., Assistant-Physician and Demonstrator of Morbid Anatomy at Guy's Hospital, 11, St. Thomas's-street, Southwark.
- **Orig. Memb.* Williams, C. J. B., M.D., F.R.S. (formerly President,) (V.P.), Consulting-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, 49, Upper Brook-street, Grosvenor-square.
- †1858-59 Williams, Charles, Esq., House-Surgeon to the Norfolk and Norwich Hospital, Norwich.
- 1859-60 Williamson, George, M.D., Fort Pitt, Chatham.
1858-59 Wilson, Edward Thomas, M.B., Montpelier-terrace, Cheltenham.
1859-60 Wilson, Robert James, Esq., 24, Grand Parade, St. Leonards-on-Sea.
- *1850-51 Wood, John, Esq., Assistant-Surgeon to King's College Hospital, 4, Montague-street, Russell-square.
1854-55 Wood, William, M.D., 54, Upper Harley-street.
1853-54 Wordsworth, John C., Esq., Assistant-Surgeon to the Royal London Ophthalmic Hospital, 50, Queen Anne-street.
1859-60 Wotton, William Gordon, Esq., King's Langley, Herts.
1852-53 Wright, Edward John, Esq., 13, Montague-place, Clapham-road.
1858-59 Wynter, Hugh B., Esq., Resident Assistant Medical Officer at St. George's Hospital.



LIST OF SPECIMENS

EXHIBITED AT THE MEETINGS OF THE SOCIETY DURING
THE SESSION 1860-61.

DISEASES, ETC., OF THE NERVOUS SYSTEM.

	Page
1.	
Molluscous (sebiparous) tumour, developed in the external auditory meatus, causing absorption of the petrous bone and abscess in the cerebellum. } Mr. TOYNBEE	1
2.	
Multiple Neuromata. Mr. T. SMITH	1
3.	
Apoplexy, with peculiar tetanic spasm. Slight softening of, and extravasation of blood within, the pons Varolii. Clot in right corpus striatum. Very large clot in the right cerebral hemisphere, and third and fourth cerebral ventricles. } Dr. JOHN W. OGLE	2
4.	
Atrophic softening of the pons Varolii. Embolism of one of the cerebellar arterial branches. } Dr. JOHN W. OGLE	4
5.	
Extravasation of blood into the pons Varolii, and one of the crura cerebelli. Rapid death by apnœa. } Dr. JOHN W. OGLE	6
6.	
Scrofulous deposit in the 'right' hemisphere of the cerebellum. Old-standing clot of blood, and scrofulous deposit on the 'right' side of the cerebellum. Hemiplegia on the corresponding (the right) side of the body. } Dr. JOHN W. OGLE	8

	Page
7.	
Inflammation of the spinal cord (myelitis).	9
8.	
Syphilitic disease of the skull, followed by epilepsy, and treated by trephining.	11
9.	
Necrosis of the petrous bone, causing destruction of its middle third, and abscess in the cerebellum.	13
10.	
Extensive hæmorrhage into the substance of the cerebral hemisphere after emotional excitement.	15
11.	
Hæmorrhage into the pons Varolii.	16
12.	
Tubercular disease of cerebellum. Amaurosis. Phthisis.	17
13.	
Extensive hæmorrhage into the left hemisphere of the cerebellum.	19
14.	
Obstruction of the middle cerebral artery of the right side, in connection with hemiplegia and cardiac disease.	20
15.	
Internal cranial exostosis in a case of epilepsy, fatal from delirium tremens.	23
16.	
Case of chronic hydrocephalus after birth.	23
17.	
On the weight and specific gravity of the brain.	27

DISEASES, ETC., OF THE ORGANS OF RESPIRATION.

	Page
1.	
Millstone-makers phthisis. Siliceous matter found in the lungs. }	Dr. PEACOCK . . . 36
2.	
Case of pneumo-thorax, resulting from the opening of a vomica during the progress of pleuritis. }	Dr. ROBINSON . . . 40
3.	
Two specimens of malignant disease of the larynx. }	Dr. BROADBENT . . . 44
4.	
Epithelial cancer of the tongue. Cancer in the lungs. }	Mr. HUTCHINSON . . . 46
5.	
Necrosed cartilage expectorated in a case of syphilitic laryngitis; use of the laryngoscope in diagnosing the condition of the glottis. }	Dr. GIBB . . . 48
6.	
Diseased lung, in connection with central limited empyema. }	Dr. RISDON BENNETT . . . 49
7.	
Calcification of the cartilages of the larynx, including the arytenoid. }	Dr. GIBB . . . 51
8.	
Disease of the cricoid cartilage in a child. }	Mr. DURHAM . . . 52
9.	
Larynx of a man aged 103 years.	Mr. E. CANTON . . . 53
10.	
Fibrinous cast of the rima glottidis.	Mr. BALLARD . . . 56
11.	
Cancerous tumour involving the larynx, and dislocating the epiglottis and hyoid bone. Death from sudden spasm. }	Mr. H. THOMPSON for Dr. ROBERTSON . . . 56
Report on the above specimen.	Dr. GIBB and Dr. DICKINSON 57

12.		
Dilatation of the bronchial tubes.	Dr. WILKS	58

DISEASES, ETC., OF THE ORGANS OF CIRCULATION.

1.		
Retroversion of one of the aortic valves, and destruction of some of the chordæ tendineæ of the mitral valve.	} Dr. PEACOCK	59
2.		
Aneurism of the internal carotid artery in the cavernous sinus.	} Mr. T. HOLMES	61
3.		
Three cases of tubercular pericarditis.	Dr. BRISTOWE	63
—Case 1.—Phthisis. Tubercular ulceration of ileum, with perforation. Tubercular pericarditis.	} Dr. BRISTOWE	64
—Case 2.—Tubercular pericarditis.	Dr. BRISTOWE	64
—Case 3.—General tuberculosis. Symptoms during life chiefly due to the tubercle in the brain. Tubercular pericarditis.	} Dr. BRISTOWE	66
4.		
Dissecting aneurism of aorta.	Dr. WILKS	67
5.		
Two specimens showing deviation of the popliteal artery from its ordinary course.	} Mr. JOHN CROFT	68
6.		
Aneurism of the apex of the left ven- tricle of the heart.	} Mr. CANTON	69
7.		
Enlargement of the pulmonary artery in contraction of the mitral orifice.	} Dr. WILKS	70

8.

Aneurism of the aorta. Rupture into the pericardium. Subsequent closure by inflammation. } Dr. WILKS 71

9.

Rupture of the left ventricle of the heart. } Dr. QUAIN 72

10.

Aneurism of the inferior mesenteric artery, with small sacs in the ascending aorta, illustrating the mode of formation of aneurisms. } Dr. PEACOCK 73

11.

Obstructive disease of the aortic and mitral valves. Small aneurism at the base of the left ventricle. } Dr. PEACOCK 75

12.

Communication between the ventricles of the heart. Tubercular peritonitis and ulceration of bowels. } Dr. HILLIER 76

13.

Enlargement of the pulmonary artery and its branches, in connection with bronchial disease. } Dr. WILKS 78

14.

Adherent pericardium, &c. Dr. RISDON BENNETT . . 78

15.

Three specimens of extensive deposit of fibrin in the cavities of the heart. } Mr. HENRY LEE 79

16.

A case of spontaneous coagulation of the blood in the arteries of the limbs. } Dr. DICKINSON 81

DISEASES, ETC., OF THE ORGANS OF DIGESTION.

I. PHARYNX, ŒSOPHAGUS, STOMACH, AND INTESTINES.

	Page
1.	
Stomach of a girl nine years old perforated by an ulcer.	} THOMAS BUZZARD, M.B. . . . 84
2.	
Fistulous orifice in the abdominal parietes opening into a circumscribed cavity, which communicated with the interior of the colon and duodenum; and indirectly with the gall-bladder.	} Dr. MURCHISON 85
3.	
Imperforate anus; the rectum opening into the vagina.	} Mr. SEDGWICK 87
4.	
Imperforate anus.	{ J. C. LANGMORE, M.B., for Dr. FRANCIS 87
5.	
Cancer of the stomach.	{ Mr. H. THOMPSON for Mr. V. JACKSON 88
6.	
Rounded body in the peritoneal cavity, removed at an operation for hernia.	} Mr. H. THOMPSON, for Mr. NESBITT 89
Report on the above specimen.	{ Dr. WILKS and Mr. JOHN WOOD 90
7.	
Cancerous growth surrounding the rectum.	} Dr. M. SCHULHOF 90
Report on the above specimen.	{ Dr. MURCHISON and Mr. T. J. ASHTON 91
8.	
Case of colloid cancer illustrating the independent vitality of the cancer cell.	} Dr. DICKINSON 92
Report on the above case.	{ Dr. WILKS and Dr. BRISTOWE 93

9.		
Cancer of the peritoneum, implanted upon the surface of the liver.	} Mr. HOLMES	94
10.		
Stricture of the descending colon.	{ Dr. COPLAND for Mr. MARGETSON	94
11.		
Scirrhus of the cardia and œsophagus.	Dr. LEARED	95
12.		
Intestine, presenting cicatrices and unhealed ulcers, with sloughing of the mesenteric glands, from typhoid fever, after relapses; also the pancreas and duodenum, exhibiting destruction of the areolar tissue between the acini of the former, and perforation of the muscular coat of the latter, through abscess in the contiguous tissues.	} Dr. HERMANN WEBER	96
13.		
Infiltrated scirrhus stricture of the œsophagus, implicating the trachea.	} Dr. ANDREW	99
Appendix to the above case.	Dr. GIBB	100
14.		
Cancer of the œsophagus; exostosis of vertebræ.	} Dr. WILKS	101
15.		
Congenital stricture of the duodenum.	Dr. WILKS	101
16.		
Case of internal strangulation of a large portion of the ileum.	} Dr. QUAIN, for Mr. H. S. TAYLOR	103
17.		
Stricture of the œsophagus from malignant disease.	} Dr. DAVIS	104
Report on the above case.	{ Mr. NUNN and Mr. HULKE	105

18.		
Intestinal obstruction, by old adhesions, with strangulated femoral hernia, below the point of stricture.	}	Dr. BROADBENT 106
19.		
Inguinal hernia returned "en masse."		Dr. BROADBENT 107
Report on the above specimen.	{	Mr. NUNN and Mr. HULKE 107
20.		
Malignant disease of the œsophagus, ulcerating into the subclavian artery.	}	Dr. DICKINSON 108
21.		
Transverse laceration of the jejunum, from a blow on the belly, with complete division of the bowel; no effusion of its contents into the peritoneal cavity.	}	Mr. PARTRIDGE 109
22.		
Internal strangulation of the end of the small intestine (ileum), produced by its passage through an aperture in the mesentery of the appendix vermiformis.	}	Mr. PARTRIDGE 110
23.		
Internal strangulation of the small intestine, near the ileo-cæcal valve, by the pressure of a ring, formed, apparently, by the union of two contiguous appendices epiploicæ, from the sigmoid flexure of the colon.	}	Mr. T. HOLMES 111
24.		
Villous cancer (so-called) of the intestine.	}	Dr. CRISP 113
Report on the above specimen.	{	Mr. T. HOLMES, and Mr. J. W. HULKE 114
25.		
Poisoning by nitric acid.		Dr. CRISP 114

26.

Congenital diaphragmatic hernia, allowing nearly all the small intestines, and two-thirds of the large, to pass into the right side of the thorax.	Dr. HILLIER	115
--	-----------------------	-----

27.

Abdominal section for the relief of intestinal obstruction.	Mr. LAWSON	117
---	----------------------	-----

28.

Villous tumours of the rectum.	Mr. T. HOLMES	120
--------------------------------	-------------------------	-----

29.

Malformation of duodenum in a child.	Dr. GEO. BUCHANAN	121
--------------------------------------	-----------------------------	-----

 II. LIVER AND PANCREAS.

30.

Large gall-stone ejected by vomiting.	{ Mr. H. THOMPSON for Mr. G. E. JEAFFRESON	129
---------------------------------------	---	-----

Report on the above specimen.	Dr. HARLEY	129
-------------------------------	----------------------	-----

31.

Two specimens of accessory pancreas,	Dr. MONTGOMERY	130
--------------------------------------	--------------------------	-----

 DISEASES, ETC., OF THE GENITO-URINARY ORGANS.

SUB-SECTION I.—KIDNEYS, BLADDER, CALCULI, ETC.

1.

Crystals of diabetic sugar.	Dr. GIBB	131
-----------------------------	--------------------	-----

2.

Urinary calculi from the urethra, prostate, and bladder.	Mr. FERGUSON	133
--	------------------------	-----

3.

A kidney showing a calculus in its pelvis, and the effects.	Mr. JOHN CROFT	134
---	--------------------------	-----

4.

Uric acid calculi.	Dr. LEARED	134
--------------------	----------------------	-----

5.			
Misplacement of right kidney, probably consequent upon peri-nephritis oc- curring at a very early period of life.	}	Mr. DURHAM	135
6.			
Chronic calculous pyelitis, with dila- tation of the calyces of the kidneys.	}	Dr. HARE	135
7.			
Encysted calculus; removed by opera- tion, with a portion of the cyst: successful result.	}	Mr. HENRY THOMPSON, for Mr. CADGE	136
8.			
Calculus impacted in a sac at the base of the bladder.	}	Mr. HENRY THOMPSON	138
9.			
Numerous prostatic calculi.		Mr. HENRY THOMPSON	139

SUB-SECTION II.—GENITAL ORGANS, MALE.

10.			
Entire absence of the penis, from syphilitic ulceration, simulating her- maphrodisism.	}	Dr. GIBB, for Mr. W. CURRAN	139
11.			
The urethra from a case of old-standing stricture, treated by internal incision two years and a-half ago.	}	Mr. HENRY THOMPSON	141
12.			
Undeveloped testicle from the body of an idiot.	}	Mr. CURLING	143
13.			
An account of the structure and se- cretions of a testicle detained in the inguinal canal.	}	Mr. CURLING	143
14.			
Sequel to a case of removal of the testicle reported in the last volume of the "Transactions" of this So- ciety.	}	Mr. T. HOLMES	145

15.

- Sequel to a second case of removal of the testicle in a young child on account of a rapidly-growing tumour. } Mr. T. HOLMES . . . 146

16.

- Medullary cancer of the testis. } Mr. HUTCHINSON . . . 147

SUB-SECTION III.—GENITAL ORGANS, FEMALE.

17.

- A fibro-muscular polypus growing from the uterus, and containing a cyst, and a small fatty tumour. } Mr. T. SMITH . . . 148

18.

- Case of exfoliation of the entire mucous membrane of the womb during menstruation. } Dr. TILT . . . 149

19.

- Ovarian tumour; discharge of contents into abdominal cavity; condition of peritoneum, simulating colloid cancer. } Dr. BRISTOWE . . . 150

20.

- Portion of a tumour attached to the right ovary and broad ligament. } Mr. SWETE . . . 153

21.

- Polycystic ovarian tumour of right side, and fibrous tumour of left side, successfully removed from the same patient at one operation. } Dr. GIBB, for Mr. BAKER BROWN . . . 154

22.

- Ovarian cyst, which proved fatal by spontaneous rupture. } Mr. SPENCER WELLS . . . 155

23.

- Ovarian cysts and tumours removed by ovariectomy. } Mr. SPENCER WELLS . . . 156

24.		
Case of calcified tumour removed from the abdomen.	{ Dr. PEACOCK, for Dr. THUR-	
	NAM	157
Report on the above case.	Dr. MONTGOMERY	158

DISEASES, ETC., OF THE OSSEOUS SYSTEM.

1.		
Fracture of the neck of the condyle of the lower jaw, with displacement of the lower fragment into the meatus auditorius externus. Serous discharge from the ear.	} Mr. T. HOLMES	159
2.		
Comminuted fracture of the clavicle, between the coraco-clavicular ligaments, and acromio-clavicular joint.	} Mr. CANTON	161
3.		
Parts removed in an excision of the elbow-joint.	} Mr. DURHAM	162
4.		
Numerous specimens of chronic rheumatic arthritis of the hip, elbow, knee, and spine, with extensive calcification of the arteries.	} Mr. CANTON	162
5.		
(A) Fracture of the skull in the occipital region, with laceration of the torcular herophili.	} Mr. T. HOLMES	167
(B) Laceration of the two internal coats of the axillary artery.		
6.		
Ankylosis of the hip-joint. Peculiar bony union between the small trochanter of the femur and the anterior inferior spinous process of the ilium.	} Dr. JOHN OGLE	169
7.		
Bones from a case in which amputation had been performed ten months after excision of the knee.	} Mr. T. HOLMES	171

Report on the above case.	{ Mr. T. BRYANT, Mr. T. HOLMES, Mr. J. W. HULKE . . .	. 172
8. The skull, pelvis, and long bones of the extremities of an aged female dwarf.	{ Mr. CANTON . . .	. 173
Report on the pelvis.	Mr. JOHN WOOD . . .	. 175
9. An excised knee-joint.	Mr. J. W. HULKE . . .	. 176
10. A specimen of comminuted fracture of the femur, in which the condyles had been completely separated by a vertical split which had extended into the joint.	{ Mr. GEORGE LAWSON . . .	. 177
11. Specimen of a comminuted simple fracture of the left patella, with partial bony union, one year after the accident.	{ Mr. R. PARTRIDGE . . .	. 178
12. Specimen of comminuted simple frac- ture of the patella, recent.	{ Mr. R. PARTRIDGE . . .	. 178
13. United fracture of the cervix femoris at its junction with the shaft.	{ Mr. CANTON . . .	. 179
14. On the pathological changes produced in the shoulder-joint by traumatic dislocation, as derived from an ex- amination of all the specimens illus- trating this injury in the Museums of London.	{ Mr. W. H. FLOWER . . .	. 179

DISEASES, ETC., OF THE ORGANS OF SPECIAL SENSE.

	Page
1.	
Ulceration of the fibrous lamina of the membrana tympani. }	Mr. J. HINTON 201
2.	
Bony degeneration of the contents of an eyeball. }	Mr. J. Z. LAURENCE 201
Report on the above case.	Mr. J. Z. LAURENCE 201

TUMOURS, CYSTS, ETC.

1.	
Epithelial cancer of the lower jaw, for which one-half of that bone was excised. }	Mr. W. ADAMS 202
Termination of the above case.	Mr. W. ADAMS 204
Report on the above specimen.	Dr. WILKS and Mr. HOLMES 205
2.	
Melanoid cancer, developed in a com- mon dark mole containing pigment. }	Mr. H. THOMPSON 206
3.	
Congenital tumour of the neck.	Mr. T. HOLMES 206
Report on the above case.	{ Dr. OGLE, Mr. ADAMS, and Mr. HOLMES 207
4.	
Tumour of the breast.	Mr. JOHN WOOD 203
Report on the above case.	Dr. WILKS 210
5.	
Sub-peritoneal tumours of a peculiar character, associated with cutaneous tumours. }	Dr. BROADBENT 210
Report on the above case.	{ Dr. BRISTOWE and Dr. W. H. BROADBENT 212

6.		
Enlargement of the viscera and glands.	Dr. WILKS	213
7.		
Syphilitic disease of spleen, liver, and testes.	} Dr. WILKS	216
8.		
Syphilitic deposit in the spleen and testes.	} Dr. WILKS	217
9.		
Tumour and portion of lower jaw, removed by excision.	} Mr. SPENCER WELLS	217
10.		
Tumour of probably cancerous nature, following recurrent fibroid.	} Mr. DURHAM	219
Report on Mr. Durham's case of tumour from the shoulder.	} Dr. WILKS and Mr. DURHAM	220
11.		
Malignant ulcer occurring in a cicatrix.	Dr. DAVIS	220
Report on the above case.	Mr. NUNN and Mr. HULKE	221
12.		
Sero-cystic disease of the breast.	Mr. THOMAS BRYANT	222
13.		
Excision of the entire tongue for epithelial disease.	} Mr. THOMPSON, for Mr. FIDDES	223
Report on the above case.	} Mr. HUTCHINSON, Mr. THOMPSON, and Mr. LAWSON	223

DISEASES OF THE DUCTLESS GLANDS.

1.		
Hypertrophied spleen.	Mr. JAMES PART	224
Report on the above case.	Dr. HARE	225
2.		
Enlarged thymus gland, in connection with a case of laryngismus stridulus.	} Dr. HARE	227

3.		
Case of bronchocele proving fatal by compression of the trachea.	}	Dr. DICKINSON 229
4.		
Chronic enlargement of the lymphatic glands and spleen, with extreme anæmia.	}	Mr. JONATHAN HUTCHINSON 230

MISCELLANEOUS SPECIMENS, INCLUDING MALFORMA-
TIONS OF EXTERNAL PARTS, DISEASES OF THE SKIN,
DIPHThERIA, ETC.

1.		
True keloid.		Mr. SEDGWICK 234
2.		
Arrest of development of the left per- pendicular ramus of the lower jaw, combined with malformation of the external ear.	}	Mr. E. CANTON 237
3.		
Cast of the mouth of a female child, the subject of hereditary syphilis.	}	Mr. NUNN 239
4.		
Outgrowth of nails in a woman, æt. 84.		Mr. PARTRIDGE. 240
5.		
Diphtheria—larynx and trachea.		Dr. GEORGE HARLEY . . . 241
6.		
Cast of a deformity of jaw and teeth from a child, æt. 9, caused by sucking the thumb.	}	Mr. THOMAS BALLARD . . . 242

SPECIMENS FROM THE LOWER ANIMALS.

1.		
Intus-susception and impaction of the bowels of a horse, producing death in forty-eight hours.	}	Dr. GIBB, for Mr. W. CURRAN 242

2.		
Laryngitis in a white-lipped Peccary (<i>Dicotylis labiatus</i>).	}	Dr. GIBB 243
3.		
Cartilages of Wrisberg in the larynx of a Mona monkey (<i>Cercopithecus</i> Mona).	}	Dr. GIBB 244
4.		
Case of fatal parturient hæmorrhage in a cat.	}	Dr. GRAILY HEWITT . . . 244



LIST OF PLATES.

PLATE	PAGE
I. Extravasation of Blood into the pons Varolii (Dr. J. W. OGLE) .	7
II. Portions of the Aorta, &c., showing the mode of formation of Aneurisms (Dr. PEACOCK)	74
III. Deposit of Fibrin in the Cavities of the Heart (Mr. H. LEE) .	79
IV. Colloid Cancer of the Intestine, illustrating the Independent Vitality of the Cancer-cell (Dr. DICKINSON)	93
V. Stricture of the Duodenum (Dr. WILKS)	102
VI. Scirrhus of the Ileum and Cæcum (Mr. LAWSON)	117
VII. Chronic Rheumatic Arthritis of the Knee, &c. (Mr. E. CANTON) .	163
VIII. Pelvis of an aged Female Dwarf (Mr. E. CANTON)	174
IX. Cancer of the Lower Jaw-Bone (Mr. W. ADAMS): Congenital Tumour of the Neck (Mr. T. HOLMES): Diphtheritic Exuda- tion (Dr. HARLEY)	204
X. Arrested Development of the Left Perpendicular Ramus of the Lower Jaw (Mr. E. CANTON)	236



LIST OF WOODCUTS.

FIG.	PAGE
1. Portion of Lung, with excess of adherent carbonaceous material . . .	38
2. Siliceous and Carbonaceous Particles from the Lung . . .	39
3. Cancer of the Tongue and Lungs—microscopic elements . . .	46
4. Larynx of a man, aged 103 years, showing calcified parts . . .	54
5. Ditto	54
6. Ditto, microscopical appearances	55
7. Hypertrophied Heart—Retroversion of Posterior Semi-lunar Valve . . .	60
8. Aneurism of the Apex of the Left Ventricle	69
9. Left Femoral Artery: Spontaneous Coagulation of Blood in . . .	83
10. Diabetic Crystals	132
11. Urinary Calculi from Urethra, Prostate, and Bladder	133
12. Simulated Hermaphroditism from Syphilitic Ulceration	140
13. Stricture of Urethra: Cicatrix of Internal Incision	142
14. Comminuted Fracture of the Clavicle	161
15. Portion of a Spine, showing the growing together of the Vertebrae, and deposition of Calcareous Salts	164
16. Radial and Ulnar Arteries altered by Calcareous Deposit	166
17. Ankylosis of the Right Hip-Joint	170
18-21. Diagrams of the normal condition of the Glenoid Fossa and Head of the Humerus, and their Pathological Alterations in Traumatic Dislocations	182-183
22. Tumour of Lower Jaw removed by Excision	217
23. Ditto, View of the Patient (from a photograph)	218
24. Cell and Fibre Elements in Enlargement of the Spleen	232
25. Ditto, in Enlargement of Lymphatic Gland	233



REPORT.

SESSION 1860-61.

I.—DISEASES, ETC., OF THE NERVOUS SYSTEM.

1. *Molluscous (sebiparous) tumour, developed in the external auditory meatus, causing absorption of the petrous bone and abscess in the cerebellum.*

The patient, from whom the diseased parts were removed, was a young woman, æt. 24, under Mr. Toynbee's care, at St. Mary's Hospital. She had been subject to a discharge from the right ear for five years, and to severe pain in that organ for seven weeks. These symptoms increased, and were accompanied by intense pain in the head; and she died on the third day after her admission into the Hospital.

On dissection, an abscess as large as a walnut was found in the right hemisphere of the cerebellum, close to the petrous bone. On dissecting the latter bone, an orifice was observed in the posterior part of the external meatus, three-quarters of an inch long and half-an-inch broad. This communicated with a cavity distended by laminæ of epidermis, and having all the characters of the contents of a molluscous tumour. This matter extended posteriorly, causing an aperture, as large as the external one, in the posterior part of the petrous bone. This aperture was covered by dura mater of a darker colour than natural, and which separated the cavity in the bone from the abscess in the cerebellum. If the tumour had been removed from the ear in early life, instead of being treated as a case of *otorrhœa*, its progress might have been arrested and the life of the patient saved.

Mr. TOYNBEE, 16th of October, 1860.

2. *Multiple Neuromata.*

Twelve neuromata removed after death from a woman between sixty and seventy years of age. The largest had existed for more than forty

years. They were situated upon the internal cutaneous, and posterior interosseous nerves of the forearm. In size they varied; one or two being as large as walnuts, while the smallest was about as big as a No. 6 shot.

The largest, being those of longer growth, were situated towards the distal extremity of the nerves, and were surrounded by the filaments of the nerve spread over them in a fine network. These tumours had apparently originated within the neurilemma; a view confirmed by the evident position of the smallest tumours. These were placed on the trunks of the nerves higher up the arm, and they were plainly within the nerve-sheath. One of these growths, the largest, situated on the internal cutaneous nerve, just below the inner condyle, had latterly been the seat of great pain.

Microscopic examination showed these growths to be composed of dense fibrous tissue, fine in fibre, and pretty abundantly nucleolated; the two largest had undergone partial calcareous degeneration.*

Mr. T. SMITH, 6th of November, 1860.

3. *Apoplexy, with peculiar tetanic spasm. Slight softening of, and extravasation of blood within, the pons Varolii. Clot in right corpus striatum. Very large clot in the right cerebral hemisphere, and third and fourth cerebral ventricles.*

Preliminary History.—W. R., a plumber, æt. 49 or 50, was of a gouty family, but temperate in his habits, with broad-set chest and limbs well formed. When about thirty years old, he was the subject of lead-colic and of some degree of paralysis of both forearms and hands, but quite recovered the use of his limbs. Twelve years ago, he again was the subject of colic, but at that time the muscles of the arms and hands were unaffected. As he was recovering from this attack he was seized with “a fit,” becoming unconscious and noisy, and tossed himself about in a most violent manner, tearing surrounding objects. His consciousness returned in twenty-four hours, and he was quite well in a fortnight. For some years past he had been affected with obscure pains in the limbs, and, on November 21st (being in a recumbent posture), whilst painting the roof of the Pimlico Railway Station, he was seen to roll off the scaffold. His fall was at once arrested, but he was found quite insensible, and was immediately brought to St. George’s.

Symptoms on admission.—There was a marked blue line on the gums. The surface was warm, except as regards the skin of the right leg and foot, the temperature of which was very much lower than on the oppo-

* This specimen is now in the Museum of St. Bartholomew’s Hospital.

siteside. The superficial veins of all parts were especially turgid. Attempts at swallowing produced suffocative efforts. The eyes were prominent, and eyelids motionless when touched; the face pale, the pupil of the 'right' eye was oval and dilated, and both were very slightly sensible to light. The aperture of the left nostril was smaller than that of the right, and no movement of the *alæ nasi* existed during inspiration. There was a considerable prominence of the pectoral muscles (possibly from rigidity*), and very slight thoracic movements, both sides being in this respect alike. The respirations were 20 per minute, and stertorous. A certain degree of spasmodic jerking existed in inspiration, which was noisy and rattling. Much frothy mucus escaped from the mouth. The position of the heart was natural; but its impulse was remarkably increased; owing to noisy respiration the sounds could not be clearly heard. '*Violent pulsations*' of the right carotid and temporal arteries existed. The action of the left carotid could '*scarcely be felt.*'

Pulse 60, full and strong; somewhat more full and strong at the right wrist. Soon after admission, the urine was passed unconsciously. There was complete abolition of sensibility, and frequent attacks of '*tetanic spasm*' of the whole frame, lasting for a few seconds, and recurring every few minutes. During the intervals there was a considerable difficulty in flexing and extending the arms and legs, owing to their rigidity. There was complete paralysis of all the limbs, and more wrinkles on the left than on the right side of the face, the muscles of which were obviously the weakest. There was no vomiting. On attempting to cause reflex action by tickling the soles, such movements were very slightly produced by tickling the right sole, but were abundantly manifested on tickling the other foot. The patient was purged, and bled to twelve ounces. Shortly after bleeding, there was more spasmodic jerking in breathing, and the '*left*' pupil became dilated to the same size as the opposite and oval one. The spasms of the body became very great during the bleeding. The pulse rose to 160, and the tetanic spasm ceased, the limbs being quite freely moveable. The respiration gradually became slower, sinking to 5 per minute, and the pulse to 28 per minute, and death occurred about two hours after admission. Immediately before death the '*left*' pupil became more dilated than the right one, and the eyes more and more prominent, separating the eyelids. The pulse was found to beat regularly for nearly two minutes after respiration had apparently totally ceased.

Post-mortem examination.—A very large clot of extravasated blood was found in the substance of the right cerebral hemisphere, and

* Suggested by Mr. Dudfield, to whom, as well as to Mr. Clapp, Hospital clerks at the time, I am indebted for several clinical observations carefully made.

also filling the lateral third and fourth cerebral ventricles. Moreover, there was a small quantity of extravasated blood, and some degree of 'softening' in the centre of the pons Varolii, *where some of the veins were large and permanently dilated*.* The medulla oblongata was natural. The arteries at the base of the brain, especially the basilar, were very atheromatous. The kidneys were atrophied and granular, weighing together five ounces and a-half, and contained numerous small cysts in their interior. The liver contained a large hydatid cyst, with very thick parietes.

Commentary.—One question of interest in connection with this case was: How far the very marked difference in the pulsation of the blood-vessels on either side of the neck, &c., was attributable to modification of vaso-motor influence as a result of the lesion of the nervous centre? Might this difference be independent of such influence, and merely owing to pressure upon the large vessels at the root of the neck by morbidly contracting or rigid muscles?

The special turgidity of the superficial veins on the 'right' side of the body is remarkable. The recurring tetanic starts of the general muscular system with intervening permanent rigidity is very worthy of notice; as also the irregular dilated condition of the 'right' pupil; the partial loss of power of the facial muscles on the 'right' side, and the difficulty in procuring reflex action by tickling the 'right' foot, the side corresponding to the main intracranial mass of extravasated blood.

The permanently dilated condition of veins found within the substance of the pons Varolii is observable as indicating, no doubt, abundant venous congestion of this organ, anterior to the final softening, &c., in that structure.

Dr. JOHN W. OGLE, 4th of December, 1860.

4. *Atrophic softening of the pons Varolii. Embolism of one of the cerebellar arterial branches.*

Preliminary History.—J. U., æt. 50, had enjoyed general good health until the last six years, during which period he was subject to carbuncles. He had been in St. George's Hospital for slight pleurisy shortly before his last admission, but left in about six weeks tolerably well. At that time there was no sugar and no albumen in the urine. On the 15th of May, 1860, he was seized with a 'fit,' and was found on the floor in a state of insensibility. When he recovered he was 'not' hemiplegic, but became so subsequently.

* Preparation preserved in St. George's Hospital Museum as No. 4 b. Sub-series v., Series xx.

Symptoms on final admission.—When received into the Hospital, on May 16th, there was complete loss of motor power and of sensibility of the skin on the 'left' side. The limbs were quite lax, and free from muscular rigidity. The right corner of the mouth and the outer edge of the right eyebrow were depressed. The eye-balls and pupils were unaffected. He was unable to articulate a single word, but appeared to understand what was said to him. Pulse 88, soft and full. The urine had to be drawn away by the catheter, and was subsequently found to contain a trace of albumen, and was full of lithates. He gradually became comatose, and died without any amendment.

Post-mortem examination.—Much sub-arachnoid fluid existed within the 'cranium,' and what is called a wet brain was found. The cerebral lobes, fornix, and central parts of the brain proper were natural, but the central part of the pons Varolii was very greatly softened, and of a creamy-yellow colour.* The basilar artery was exceedingly atheromatous, also very dilated and tortuous; and all the large cerebral arteries were atheromatous. In one of the cerebellar arteries 'a large and firm clot' of dark-coloured fibrin existed, quite plugging up the canal. This fibrinous mass had not degenerated or undergone any visible changes.

The 'heart's walls and valves' and appendages were in all respects natural, excepting some atheroma of the aortic valve-flaps. There was a considerable-sized clot of coagulated fibrin and blood in the left ventricle. Excepting a few old pleural adhesions the lungs were natural.

In the 'abdomen' the kidneys were found to be congested, but the other organs were all natural.

Commentary.—It is not unworthy of remark that in this case, whilst complete obstruction of a cerebellar arterial branch existed, giving rise most probably to atrophic softening at the central part of the pons Varolii, nothing like fibrinous deposit or fringes were found upon the valves of the heart or their appendages; and no traces of such having been formerly lodged there were met with. There is no inherent difficulty in supposing that such fringes may have existed, and have been washed away and carried onwards in the course of the blood-circulation.

Dr. JOHN W. OGLE, 18th of December, 1860.

* Preparation will be placed in St. George's Hospital Museum. See new Catalogue, No. 3 b. Sub-series v., Series xx.

5. *Extravasation of blood into the pons Varolii, and one of the crura cerebelli. Rapid death by apnoea.*

Preliminary History.—R. H., *æt.* 45, was admitted into St. George's Hospital, November 6th, 1860, at 5.45 P.M. For several years he had been the subject of so-called asthma, and latterly the difficulty of breathing had been worse. For some time he had complained of head-ach, and had been depressed in spirits, owing to domestic trouble. On the morning of the day on which he was attacked, he complained, whilst dressing himself, of pain at the back of the head, as also of a 'strange feeling' at his feet, so that he could only get on his shoes with difficulty. He never had anything like 'a fit.' A very short time before his seizure he complained considerably of pain in the head, and cried out, 'Oh my head!' several times. He became affected with '*tremblings*,' and '*loss of power*' in '*all*' his limbs, and immediately afterwards he became quite unconscious.

Symptoms on admission.—When brought to the Hospital, the general surface of the body was warm. The lips were, however, livid. There was frequent '*vomiting*,' and the breathing was '*slow and deep*.' The pulse was 78 per minute, rather full, and compressible, and the same at both wrists. The eyelids (on both sides) were *drooping*; but the muscles of the eyeballs, as of the face (including mouth) were in perfect equilibrium. The pupils of both eyes were dilated, and equally so; but neither of them responded to light. There was considerable '*trembling*' of the '*entire body*,' and complete loss of '*voluntary power*' and of '*sensibility*' of the skin in all the limbs, which could, however, be freely flexed. Consciousness was entirely wanting. The respiration became slower, and the pupils became very '*un-equal*,' the '*left*' one becoming much smaller than the right one. He sank and died at 7.15 P.M., one hour and a-half after admission.

Post-mortem examination.—On examining the '*cranium*,' the scalp and cerebral membranes were found to be very distended with blood. The cranial bones were natural. The cerebral membranes and the brain itself were natural to all appearance, except as regards the pons Varolii and the right crus cerebelli. In the pons Varolii, extending across almost the entire width of the organ, and actually bursting through the surface of the left side, was a large mass of extravasated blood. This occupied about the three superior fourths of the substance of the pons, approaching so near to the base of the fourth cerebral ventricle as to give way '*into*' it on the slightest pressure.

DESCRIPTION OF PLATE I.

Illustrating Dr. Ogle's case of Extravasation of Blood into the Pons Varolii and right Crus Cerebelli, p. 7.

The medulla oblongata has been laid open by a longitudinal incision, as also the right lobe of the cerebellum. Half of the left lobe of the latter has been removed, and the brain-substance is seen to be perfectly healthy.





The inferior fourth part of the substance of the pons Varolii (that portion nearest to the occipital bone) was quite natural in appearance. This extravasated blood extended so as to touch the upper part of the medulla oblongata (but not to encroach thereupon), and was, moreover, continued downwards into the central part of the right crus cerebelli, reaching considerably into the cerebellum. A few of the larger vessels at the base of the brain were somewhat atheromatous, but not to any great extent, and no very markedly unnatural condition of those connected with the pons Varolii or cerebellum was observable.

The cavities of the 'abdomen' and 'thorax' presented nothing unusual as to their contents.

Microscopical examination.—The cerebral structure was examined in several parts around the extravasated mass of blood, as well as elsewhere; but no evidence was found of softening or other alteration, or of any changes in the condition of the capillaries.

Commentary.—The following points in the above case suggest themselves as interesting:—

1. The extravasation of blood into the substance of the nervous structure, in which a change of texture or of blood-vessels, was so very slight or so very localized as to avoid detection by the microscope, must have existed. As the larger cerebral blood-vessels were found, to a certain degree, atheromatous, there was no doubt a change in some minute vessel which allowed of the extravasation.

2. The absence of unconsciousness at the outset of the seizure.

3. The 'subsequent' loss of intelligence, a symptom highly complicating the diagnosis as to the exact seat of the lesion.

4. The loss of motor power and of sensibility 'without rigidity' of muscle.

5. The dilated, but, at the same time, 'equal' state of the pupils when first admitted; and the contracted state of but one pupil at a later period, and that on the side corresponding to the greatest amount of extravasation in the pons Varolii.

6. The suddenness of death, and that from apnœa.

The extent of the extravasation is well illustrated by the drawing which was shown at the time of exhibition. (See Plate I.)

DR. JOHN W. OGLE, 4th of December, 1860.

6. *Scrofulous deposit in the 'right' hemisphere of the cerebellum. Old-standing clot of blood, and scrofulous deposit on the 'right' side of the cerebellum. Hemiplegia on the corresponding (the right) side of the body.*

Preliminary history.—J. E., æt. 56, had a 'stroke' several years ago, followed, as was stated, by loss of power of the 'right' side of the body. He regained a good deal of power subsequently, and chiefly in the leg. Eight months ago, pain and swelling occurred in the 'left' ankle, especially on walking, and two months ago two small ulcers broke out around the ankle, and since then there had been increased pain and swelling at the part.

Symptoms on admission.—He was pale, emaciated, with a cachectic ulcer around the ankle-joint. Dead bone was felt at the part, and the leg and foot became much worse; after treatment for some time the leg had to be amputated, when extensive caries of the os calcis was found. Hæmorrhage and phagedæna set in, and though the wound healed, the patient sank as from exhaustion.

Post-mortem examination.—On examining the cranium, a hard, rounded, and firm mass of scrofulous substance of the size of a hazel-nut was found at the lower part of the 'right' lobe of the cerebellum, almost appearing at the surface. The surrounding brain-tissue was natural. In addition, close to the fornix, situated in the convolutions of the 'right' cerebral hemisphere, bounding the great median fissure, were found the remains of two masses of extravasated blood. These masses had, for the most part, almost completely lost their colour, and had mixed with them in several parts a quantity of yellow material, which had much the semblance of old scrofulous substance. In the immediate neighbourhood of these altered masses the brain-tissue was decidedly softened in some places, and in others œdematous.

Microscopical examination showed the ordinary broken-down brain-substance in the softened parts. The altered masses of blood, besides the ordinary débris of extravasated blood, contained a quantity of molecular indefinable substance, of which it was perfectly impossible to assert that it was the remains of old-standing scrofulous material, or the contrary.

Commentary.—Several points of interest exist in this case. Thus we have the presence of strumous deposit on the 'right' side of the cerebellum, and the coexistence of the masses of extravasated blood on the corresponding side of the brain proper, and this coincidence becomes more interesting if it be supposed that these masses in the

cerebrum had the appearance of being also mingled with similar serofulous material to that found in the cerebellum.

The main point, however, worthy of observation in this case, was the existence of hemiplegia '*on the same side of the body as that on which the cerebral morbid alterations were discovered.*'

Dr. JOHN W. OGLE, 4th of December, 1860.

7. *Inflammation of the spinal cord (myelitis).*

A. M., æt. 26, was admitted into Guy's Hospital, under Dr. Pavy, on June 13th, 1860, and died July 10th. She stated that about two years before, whilst moving from one house to another, she felt a stiffness in the back of the neck, rendering her incapable of completely turning her head. This continued for about four months, when she became better, and continued so for eight months, when she began to perceive a numbness about the back and abdomen, with some loss of power in micturition and defæcation. These symptoms gradually increased, until the legs became affected; she was still able, however, to walk about, and did not take to her bed until June 6th. On admission, she was quite unable to sit up, having considerable loss of power of the whole body, although she could still move her limbs. Sensation had become almost extinct. She gradually got worse, paralysis of the bladder being complete, and necessitating constant use of catheter, and a bed-sore rapidly spread on the back. Subsequently a rash appeared all over the body, resembling that of scarlatina, and she quickly sank.

Post-mortem examination.—Body well developed. Limbs not wasted. *Brain* healthy. *Spinal cord* most extensively diseased from end to end. It was much enlarged, had a swollen appearance, was of not uniform rotundity, and was soft to the touch. In the cervical and upper dorsal region it was considerably enlarged, became smaller in the lower dorsal, and then again below this as far as the cauda equina, it swelled out into a mass about three times the natural size. On removing the cord, it was found that the same form of disease existed throughout, and which consisted mainly in the grey matter being quite destroyed, and its place occupied by a very firm semi-translucent grey inflammatory lymph. Sections of the cord in various places gave much the same appearance, the white cortical matter still existing towards the surface, and within this the adventitious matter. The latter did not exist as a solid rod, running down the cord, but had a large canal passing through its centre; this canal was about the size of the male urethra,

and, when opened, was not much unlike it, being quite smooth on its surface. Not the slightest trace of grey matter could be discovered, its place being wholly taken by the lymph. The latter was firmer than the external medullary matter, and could be easily separated from it. The cord thus, in its longitudinal aspect, exhibited a grey firm material, lining a softer white substance, with a channel running down its whole length. This canal opened above into the fourth ventricle, the inflammatory product being gradually lost on the sides of this cavity; it appeared thus as if it had been formed, or its existence determined, by the natural central canal of the cord. The transverse sections might be likened to a piece of macaroni surrounded by a soft, white matter; indeed, the appearance of the lymph much resembled this substance when boiled. The canal was empty when exposed, but it had probably contained fluid. The greater enlargement of the cord, at the upper dorsal part, was due to the adventitious deposit being there collected in a circumscribed form, with a distinct boundary, so that it was almost deserving the name of tumour. It differed only, however, from the other parts in its being vascular; the microscopic elements being exactly the same—viz., delicate nucleated fibres. In several parts the arachnoid surfaces were slightly adherent by an apparently recent exudation, but they were easily separable.

This case would have been one of unusual interest had there been a good clinical history, whereby the symptoms during life could have been referred to the lesion of the cord discovered after death. As it is, however—from the extreme illness of the girl when first seen, not long before her death—nothing more positive can be advanced than the general statement as to her condition, as given above. A considerable interest, however, attaches to the state of the cord itself, as manifesting, in a marked degree, one of the morbid changes to which it may be subject. There is also another point in connection with the general subject of morbid anatomy not to be overlooked in this case; and that is, the fact of the inflammatory product being diffused throughout the cord, and at the same time collected at one spot into a circumscribed mass, to which none other designation than that of tumour can be given, showing, indeed, how the material composing the two are identical.

Dr. SAMUEL WILKS, *4th of December, 1860.*

8. *Syphilitic disease of the skull, followed by epilepsy, and treated by trephining.*

This specimen was removed from a cachectic-looking man, *æt.* 35, who was admitted into Guy's Hospital on February 14th, 1860, under the care of Mr. Birkett. There was no history of any accident, and he denied having been the subject of any syphilitic disease.

Ten months prior to his admission, a swelling appeared over the *left* parietal bone, a severe burning pain in the part having previously existed for some few weeks. He applied for advice at a Metropolitan Hospital, where the abscess was freely opened; not much pus escaped at the time, but from that date the discharge became profuse, and also very offensive. The pain in the part, for the whole of this period, had been very severe, at times rendering him almost wild, and seriously involving his memory. No remedies appeared to have given him any relief.

On February 10th, four days prior to his admission into the Hospital, on seeking advice, his head was probed; this slight operation gave him some pain, and was followed by an epileptic fit; this lasted some minutes, and left him with paralysis of his right arm and leg.

On February 14th, he was admitted into Guy's Hospital, with partial paralysis of his right arm and leg; the face was natural, betraying only an expression of great anxiety. Over the left parietal bone were several discharging sinuses, all communicating with roughened and nodulated inflamed bone. He complained of severe and constant pain in the head at the seat of the disease, but otherwise all his functions appeared natural.

On the 17th, or third day after admission, he was again seized with a severe epileptic fit. A crucial incision was then made over the diseased bone, but without relief, as the fits returned, off and on, for some hours. At this time the convulsions were most violent, chiefly affecting the right side of the body and the left side of the face, the diseased bone being situated on the left side of the head.

At this time I was called to see him. The fits were still severe, and had lasted about three hours, evidently threatening life. The local character of the disease indicated local irritation, such being quite sufficient to account for the convulsions of the right side of the body and the left side of the face.

The external condition of the parietal bone being rough and evidently inflamed, it appeared to me that, by the operation of trephining, relief might be obtained; for even if pus did not exist beneath the bone, the

operation, it was thought, might afford benefit to the inflamed and irritated dura mater.

The operation was accordingly performed, much care being necessary, as the bone cut soft and cheesy; a large circle was removed, exposing an inflamed, adherent and granulating surface of the dura mater.

Upon the inner surface of the circle of bone which was removed, a distinct nodule of new bone existed; this, it was supposed, might have added to the irritation of the membrane beneath.

The operation was attended with immediate relief; the fits ceased directly, and when the man had recovered he expressed himself as being well.

All pains in the head left him, and the paralysis gradually disappeared. It is worthy of record, also, that the patient was quite conscious during the whole period of his epileptic attack. He stated that he was conscious of being operated on, but felt quite unable to show that he was aware of what was going on.

On the 24th, or one week after the operation, a slight epileptic attack recurred, but this was unattended by any marked symptoms; after that date no repetition of the fits has to be recorded for two months. The paralysis of the face and limbs disappeared, all headach ceased, and the opening in the skull filled in; the bone around was, however, still much roughened and inflamed, and several small pieces of dead bone were removed.

On April 24th, the epileptic fits suddenly re-appeared; they recurred at variable intervals with different degrees of intensity; hemiplegia again was the result, and on June 14th he died with symptoms of supuration and pyæmia.

The *post-mortem* was made by my friend Dr. Wilks. The body was wasted and the skin yellow, as seen in pyæmia. The abdomen was tumid and tympanitic.

All the left side of the top of the head was devoid of integument; roughened and partially necrosed bone appearing in the wound; in one spot there was an opening of a circular shape, where bone had been removed by the trephine, which was now occupied by a firm, tough membrane. The bone around it was rough, in parts soft and carious, in others denser from new bone; at its circumference, where it joined the scalp, were some hard, yellow fibrous deposits. On removing the bones of the skull, the dura mater was found to be closely adherent, and softened, and collections of pus became visible between them. Pus also existed on the inner surface of the dura mater, covering the brain,

corresponding to the external disease. The brain-structure at this spot was slightly affected in its grey matter, but to no great depth.

The lungs were œdematous, but not inflamed. The lower lobe of the right side, however, had a thin layer of lymph on its surface. In the peritoneal cavity some purulent serum existed, from recent peritonitis. The liver was adherent to the diaphragm, and contained several hard yellow fibrinous masses. The spleen also was similarly involved. The kidneys were healthy.

Remarks.—The nature of the disease, and the beneficial results derived from the operation of trephining, are the chief points of interest in this case. It is almost impossible to examine the specimen, without being convinced that the appearances presented were the result of inflammation of a specific form; they are precisely such as are known to be present in syphilitic patients. And although the history of such an affection cannot be made out in the present instance, I am unable to doubt that syphilis was its true cause.

The existence, also, of the peculiar fibrinous deposits in the viscera, is another point in its favour; believing, as I do, that my colleague, Dr. Wilks's opinions upon the specific nature of these deposits are quite correct.

The benefit derived from the operation of trephining is also well displayed in the history of the case; the immediate relief to all the symptoms, and the temporary arrest of diseased action, as shown by the positive improvement of the patient, were too marked not to make one feel that such improvement was the direct result of the means employed.

That the diseased action was not entirely arrested could by no means militate against the practice employed; and although death subsequently ensued, the whole history of the case is one which, to my mind, bears valuable testimony to the importance of a similar practice in a like instance.

The specimen exhibited must be regarded as a good example of syphilitic disease of bone in all its stages.

Mr. BRYANT, 15th of January, 1861.

9. *Necrosis of the petrous bone, causing destruction of its middle third, and abscess in the cerebellum.*

A man, æt. 25, was admitted into St. Mary's Hospital, on October 13th, 1860, on account of intense pain in the right ear, which extended

over the side of the head. The history of the case was that at the age of fourteen he took a bad cold, which was followed by pain in the right ear. Attacks of pain occurred at intervals until he was twenty years of age. At this period discharge took place from the ear; this was followed by a cessation of the pain, but the hearing power was lost.

Seven months previous to his admission into the Hospital, he was again seized with intense pain in the right ear and side of the head, followed by paralysis of the muscles on the right side of the face. When admitted, he had every symptom of acute caries of the petrous bone, viz., intense deep-seated pain in the ear and right side of the head, copious discharge of a most fetid character, and polypoid growths in the external meatus.

Every attempt to diminish the pain and to arrest the progress of the disease was of but little service, and the patient died on the sixteenth day of his admission into the Hospital.

Autopsy, twenty-eight hours after death.—Scalp and cranium normal. Dura mater and arachnoid, covering the cerebral hemispheres, healthy; the vessels of the pia mater distended. The convolutions were somewhat flattened, and the substance of the brain natural in respect both to colour and consistence.

Both lateral and the third ventricles were distended with a transparent fluid, of which about two ounces were collected. Upon removing the brain from the cranial cavity, the right hemisphere of the cerebellum was found adherent to the dura mater covering the posterior surface of the petrous bone. The substance of the cerebellum at this part was soft, and formed part of the wall of a small abscess which contained green fetid pus. The dura mater at the posterior part of the petrous bone was at one point dark and softer than natural, although it was not ulcerated.

Upon removing the dura mater from the petrous bone, the latter was found to be entirely destroyed at its central part, the apex of the bone being attached to the outer part by fibrous tissue only. New bone was observed on the inner and on the outer surface of the squamous bone, indicating that nature had made an attempt to remedy the injury which had taken place in early life.

This case appears to be of especial interest from the extraordinary extent of the necrosis, and from the acute character which it assumed for a short time previous to death.

Mr. TOYNBEE, 15th of January, 1861.

10. *Extensive hæmorrhage into the substance of the cerebral hemisphere after emotional excitement.*

E. A., a servant-girl, æt. 24, was admitted into St. Mary's Hospital, under the care of Dr. Chambers, September 29th, 1860.

She was in perfect health up to Monday, September 24th, on which day she had leave of absence, and went with other young women to the British Museum. She met there a young man, to whom she was engaged to be married, in the company of some other woman, and was told that their engagement was at an end. A violent scene ensued, which lasted some time. Next day (Tuesday, 25th) she fretted very much, and on Wednesday morning became delirious and violent. She was brought to the Hospital on the 29th, after having had leeches to the head, and other treatment; and, when admitted, was in a state of stupor, with muttering delirium. The face was dusky, the expression heavy; but there was no paralysis. She remained in this state for three days; a slight drawing of the mouth to one side was said to have been observed for a time the day before death. She became rather suddenly comatose on October 2nd, and thus died.

On *post-mortem examination*, the thoracic and abdominal viscera were found to be healthy.

When the cranium was opened the surface of the cerebral hemispheres was paler than usual, the veins less full, and the membranes less injected, and the convolutions appeared slightly flattened.

The brain-substance was firm and pale; and in the left hemisphere was found a large clot of blood, external to the corpus striatum and thalamus, extending from the neighbourhood of the fissure of Sylvius to near the descending cornu of the lateral ventricle, but rather above these. The clot was soft, uniformly black, with patches of white brain-substance on its surface. It slipped out of its cavity during the examination, and was estimated to weigh an ounce and a-half or two ounces. The sides of the cavity in which it had been lodged were smooth, and stained of a pinkish-brown colour, gradually fading off into the surrounding white substance; exudation corpuscles were here found.

The lateral ventricle of this side was empty; that of the right side contained one or two drachms of clear fluid. No disease of the cerebral arteries or capillaries was found.

Dr. BROADBENT, *5th of February*, 1861.

11. *Hæmorrhage into the pons Varolii.*

J. P., a small, spare man, æt. 76, was brought into St. Mary's Hospital, November 16th, 1859, in a state of apparent insensibility, and was admitted under the care of Dr. Sibson.

He was seen to fall down in the street, and, according to his own account, feeling himself ill he supported himself against the wall, and slipped down; he remembered, also, every circumstance of his progress to the Hospital, so that at no time was he perfectly insensible.

When seen, immediately after being placed in bed, he was in a state of stupor, but could be roused by loud speaking; he comprehended questions perfectly, but his speech was very indistinct. His vision was imperfect. The left side of the face gave slight evidence of paralysis, and the tongue pointed slightly to the left; the right arm was rigid, powerless, and perfectly insensible; the right leg was rigid and trembling, but he could move it slightly, there was, however, little sensibility in it or in any part of the right side.

Three hours afterwards, the rigidity and motor paralysis of the right arm had disappeared, and he could move both arm and leg of this side readily, and grasp the hand powerfully, but the arm still remained perfectly insensible.

There was little change in these symptoms during the ten days that he lived after the attack. Intelligence remained perfect. His speech became more indistinct, and deglutition difficult. There was no facial paralysis after the first few hours, but he could not see distinctly. There was good motor power on the right side, but no sensation in the arm, and little in the leg. On the day before his death, though he could move the arm readily and grasp firmly, he could not direct the movements accurately.

For the first five or six days he slept constantly. Afterwards he became restless, and he finally died comatose.

Post-mortem examination.—The cerebral hemispheres and ventricles, healthy. A small quantity of fluid in the latter.

The left side of the pons Varolii seemed slightly larger, and felt rather softer than the right; and, on section, a clot of blood, of about the size of a pea or small 'haricot,' was found in the posterior part of this side of the pons, about midway between its superior and inferior surfaces (somewhat nearer the former) in the line of the tract of fibres leading from the lateral columns of the medulla to the brain.

A smaller extravasation was also seen in the middle crus cerebelli of that side where it meets the pons.

No examination of the rest of the body was permitted.

Dr. BROADBENT, 5th of February, 1861.

12. *Tubercular disease of cerebellum. Amaurosis. Phthisis.*

E. A., a little girl 7 years of age, was admitted into St. Thomas's Hospital, under my care, on the 18th of September, 1860. She had been living away from home, and hence a very imperfect history of her symptoms, prior to admission, was obtained. It appeared, however, that she had always been a weakly child, that for some few months she had been subject to occasional attacks of sickness, and that a week or two since she had become suddenly blind, no further cerebral symptoms having at any time manifested themselves. Her mother had died of phthisis, and she had lost several of her brothers and sisters, one by hydrocephalus, one by diarrhœa, and others at birth.

When admitted, she was thin and feeble, and lay in bed on her side unwilling to move. She had, however, the perfect use of her limbs, and sensation was everywhere natural, but she passed her water and motions without power or effort to restrain them. Her face was pale and bore an anxious expression, and she complained of pain across the forehead. She kept her eyes open, but they were totally insensible to light, and the pupils were dilated and immoveable. She was perfectly conscious, but answered questions in a whining manner. Her appetite was exceedingly good, but she was occasionally sick; her tongue was a little furred; bowels rather relaxed; she had a slight cough, and there was questionable dulness at the right apex, with some crepitation. Pulse 86, regular, very feeble; urine not albuminous.

For the next few days she continued much the same, but she was carefully watched, and the details of her condition, as given above, were, for the most part, confirmed. She continued fretful, complained of pain in the forehead, and occasionally screamed out without any obvious reason. The eyes still remained perfectly insensible to light, and generally wide open; examined by the ophthalmoscope, the retinae appeared quite healthy. The sickness still occurred at times; but the diarrhœa ceased, her tongue became clean, and her appetite continued excellent. The slight cough entirely disappeared. She still passed her evacuations under her, and lay in a torpid state, but exhibited no clear sign of paralysis. The surface was generally cool; the tip of the nose and the hands and feet mostly livid.

There was, during the whole of the time she was under observation, little daily change in her condition. The blindness, and slight headache, continued unaltered. The sickness varied, and sometimes disappeared for two or three weeks together, but always recurred. The appetite, except once or twice temporarily, remained almost ravenous up to the last. The bowels were generally inclined to looseness, and sometimes very much relaxed, but during the last week or two were constipated. About the end of November a troublesome cough came on, which continued from that time uninterruptedly, and increased, but was at no time attended by expectoration. At that time, too, the chest, which had not been examined for several weeks, was carefully explored, and much consolidation of the apex of the right lung was discovered, with indications of breaking down; and the left apex was found to be diseased, though in a less degree. Henceforth the chest was examined periodically, and with care, and the pulmonary disease was so rapid in its progress, that before her death it was found to have invaded the greater portion of both lungs. She became emaciated to the last degree, entirely helpless, but rather from weakness than paralysis, though latterly the thighs became rigidly flexed on the abdomen. Lividity of the nose, cheeks and extremities became more marked and persistent, a little œdema of the ankles came on, and bedsores appeared. The pulse increased in frequency. She continued sensible, however, though apathetic, rolled her head about, and occasionally moaned or screamed, and the eyes latterly became permanently directed upwards. She generally slept well.

On the 26th January, shortly after breakfast, she was seized with a convulsive fit, during which her head and mouth were drawn to the left side. She continued in it, perfectly unconscious, for about three hours, and at the end of that time died.

Autopsy.—The body was small, and extremely emaciated.

Head.—Calvaria and membranes of brain quite healthy. The cerebrum displayed no signs of disease, beyond some dilatation of the lateral ventricles, with accumulation of serum in them. The left lobe of the cerebellum presented as nearly as possible its natural size, so that the entire organ looked at first sight symmetrical. This lobe, however, was generally much harder than its fellow, somewhat irregular on the surface, of an opaque yellow colour, and, in great measure, without the usual lamellated character. On section, it was found to be infiltrated in the greater part of its extent by cheesy tubercular deposit—this forming a more or less rounded and nearly uniform mass, which occupied fully two-thirds of the lobe, involving every part of it except the pos-

terior and inferior third. The remainder of the cerebellum was healthy. No deposits of tubercle were discovered elsewhere. The optic nerves, tracts, commissure and lobes were perfectly healthy; the infundibulum, however, prior to the escape of fluid from the lateral ventricles, was remarkably distended with serum. Could it, from its distention, have affected injuriously the contiguous optic tracts and commissure, and so caused blindness?

Chest.—Lungs attached to the parietes by old adhesions; studded thickly, from apex to base, with yellow tubercles, which had coalesced more or less with one another, so as to form tubercular tracts of considerable extent. The disease was most advanced in the apices, and especially in the right, where numerous cavities of small size existed. Pericardium and heart healthy. Larynx and trachea healthy.

Abdomen.—There was a little serum in the abdominal cavity. The liver was rather large and congested, and contained a few small tubercles. The spleen was dense and dark-coloured, and studded with tubercular deposits. A few tubercles were found also in the kidneys, which were congested, but otherwise healthy. The stomach and intestines and other organs were all healthy, or nearly so.

Dr. J. S. BRISTOWE, 19th of February, 1860.

13. *Extensive hæmorrhage into the left hemisphere of the cerebellum.*

M. A. W., a girl of 20, who had been in service as under-nurse, was admitted into St. Mary's Hospital under the care of Dr. Alderson, February 8th, 1861.

She had enjoyed good health, but had been subject to occasional headaches. Ten days before she was brought to the Hospital she had had, for two or three mornings in succession, severe pain in the head immediately on getting out of bed, and was violently sick. The headach then became continuous, and she was no longer able to do her work. The pain in the head and sickness persisted, and in spite of treatment had become worse from day to day; the bowels had been constipated.

While under observation in the Hospital, she generally lay on the right side, her head bent forward, her knees drawn up and her eyes closed. When spoken to she answered in a whisper, and did not dare to move from fear of bringing on a paroxysm of acute pain. Her eyes also were closed even in answering questions, and all her replies were given in a tone expressive of weariness and wish to be left alone. Light was painful, and noise rather distressing. Her sight was good; the state of the pupils was not observed on account of the pain which any

disturbance caused her. Pulse 60, hesitating and irregular. Respirations 16.

The headach was always present, extending, as she said, from back to front over the top of the head; but besides this, any movement or disturbance would bring on an attack of extreme pain, causing her to moan and to grasp the bedclothes. She generally had one hand on her forehead, and during paroxysms she would place the other over the occiput. These attacks would frequently come on suddenly, without apparent exciting cause.

She remained in this state for three days, and died suddenly, immediately after having been out of bed and standing alone.

Post-mortem examination.—The lateral and third ventricles of the brain contained a large amount of clear serum (one to two ounces), but there was no softening or any evidence of inflammatory action.

In the substance of the left hemisphere of the cerebellum was found a clot of blood of about the size and form of a walnut, but rather more flat from above downwards. It was black and soft, nearly equidistant from the surface of the hemisphere at every point, and it bulged into the fourth ventricle, but had not ruptured its lining membrane. The sides of its containing cavity were smooth and of a pinkish-brown colour. There was no disease of the cerebral vessels, and all the thoracic and abdominal viscera were healthy.

Dr. W. H. BROADBENT, 19th of March, 1861.

14. *Obstruction of the middle cerebral artery of the right side, in connection with hemiplegia and cardiac disease.*

M. A. A., æt. 19, a servant, was admitted into the Victoria Park Hospital, January 5, 1861. Her aspect was anæmic, but the body fairly nourished. Weight, seven stones six pounds; height, five feet. She stated that her health had generally been good; that for one year she had suffered from palpitation of the heart, but that her present symptoms had existed only ten weeks. Since that time she has had cough, attended by expectoration, and occasionally slight hæmoptysis, hurried breathing, night sweats, debility and loss of flesh. She never suffered from rheumatism, and there was no hereditary history of phthisis. The digestive functions were tolerably healthy. The respiratory murmur beneath the right clavicle was somewhat deficient, and the expiration rather prolonged beneath both clavicles, and occasionally there could be detected a little sub-mucous crepitation. The heart's action was rapid and laboured, and accompanied by almost a harsh systolic bruit, least intense at the base. The impulse and sphere

of præcordial dulness were both abnormally great. The pulse was small and feeble, but tolerably regular. On the slightest exertion the breathing became very hurried, and the cough was often very troublesome, but attended only by scanty mucous expectoration. She improved in her general health and condition under a tonic treatment with cod-liver oil.

On the 16th of February, the catamenia had been absent six weeks, and she complained a good deal of pain in the back; but the breathing was then tolerably easy, and the palpitation less than on admission.

On the 2nd of March it was noted that for some days she had complained of drowsiness and pain of the head, with occasional double vision. On getting up in the morning of this day, she found that she could not stand, and was seized with severe burning pain over the right parietal bone. When first seen by the house surgeon she still complained of this pain; the mouth was drawn to the right side; the left side was flattened, and she could not close the left eye—the pupils were dilated and very sluggish; her articulation was indistinct, and she had entirely lost all power of left arm and leg, the sensibility of which was impaired; the pulse was feeble, and she was altogether low and exhausted. She was ordered an ether draught, and subsequently was purged by calomel and haustus sennæ, and had a blister to the nape of the neck.

March 4th, the paralysis of the face was even more marked than at first; the tongue protruded to the left and the speech considerably affected; but the pupils were less dilated and sluggish, and she could move the leg and arm a little. She complained a good deal of the severe burning pain on the right side of the head; the bowels acted freely, the respiration was easy, and the cardiac symptoms much the same as before the attack of hemiplegia. On the 8th the paralytic symptoms were somewhat less pronounced, but her spirits were much depressed, and she still complained of the burning pain in the head. Cold had been applied to the head, and a vesicatory to the right temple. A little wine was ordered her and a mixture containing chloric ether and ammonia with bicarbonate of potash.

On the following day it was evident that the pain of the head was a great deal relieved, the hemiplegic symptoms diminishing; pupils widely dilated, but the sight and intellectual faculties unimpaired; a systolic bruit was heard at the apex, masking the second sound; heart's impulse not great; pulse regular; catamenia not yet returned. Subsequently she improved a good deal as regards the paralytic symptoms, and lost the pain in the head; was quite rational and quiet in her manner, but often a good deal depressed in spirits, and requiring

a sustaining diet, with a little wine, ammonia, &c. In the night of the 27th and morning of the 28th of March she became very restless, excited, petulant and sharp in her answers, and occasionally a little wandering, but always replying rationally to any questions that were put to her. She died rather suddenly in the course of the day.

Post-mortem examination, sixteen hours after death.—Body fairly nourished, but little rigidity.

Head.—The skull-cap was easily removed, and on its removal, the vessels ramifying over the dura mater, the meningeal arteries, and the longitudinal sinus were found filled with dark coagulated blood. The vessels of the pia mater were all gorged with blood, and the surface of the brain presented the appearance of great congestion. On dissecting out and examining the arteries at the base, the *middle cerebral* on the *right side* was found to be distended and obliterated at about the centre of its main trunk by a dense hard fibrinous mass; and beyond this point, the artery and its branches were contracted and almost empty, having scarcely more than half the calibre of the corresponding branches of the *left middle cerebral artery*. The brain-substance itself was firm throughout, and equally so on both sides; on making sections of the hemispheres, abundant minute red specks were visible over the whole surface of the *white matter*, indicating general congestion. There was rather more fluid than natural in the lateral ventricles, but the parts contained in them were, as elsewhere, firm and healthy.

Thorax.—The sternum was slightly adherent on the *right side* by pleuritic adhesion. On its removal about a pint of yellow serous fluid escaped from the right pleura; on this side the pleura was much thickened, and there were numerous adhesions, both old and recent, in all parts, but especially posteriorly. On the *left side* there were also a few recent pleuritic adhesions, and some effusion of serum. Both lungs were much congested, but did not present any appearance of tubercular deposits.

Heart.—The pericardium appeared natural, but contained a considerable quantity of serous fluid, although probably not sufficient to impede in any way the heart's action. The *heart* itself was large and somewhat hypertrophied (weight, fourteen ounces and three-quarters). The *right cavities*, beyond being large and hypertrophied, were healthy, and the tricuspid and pulmonary valves natural. On the *left side*, the *auricle* was very much dilated, and its walls thin. The *mitral cusps* were found much thickened, and covered with abundant fibrinous vegetation, some soft and apparently recent, others quite hard and osseous; so that, even if the auriculo-ventricular opening was not permanently

patent, the valves must have acted very imperfectly and allowed of constant regurgitation. The *left ventricle* was large and hypertrophied. The aortic valves were somewhat thickened and opaque, and on each curtain there was a roughening and deposit of ragged fibrinous matter just over the situation of the corpus Arantii. The amount of disease was, however, probably not sufficient to have interfered materially with the closure of the orifice. The remaining viscera beyond, being much congested, showed no unnatural appearances.

Dr. RISDON BENNETT, 16th of April, 1861.

15. *Internal cranial exostosis in a case of epilepsy, fatal from delirium tremens.*

The patient was a female, æt. 40, who had been subject to epileptic fits for the greater part of her life, so far as her history could be made out. Latterly she had become intemperate and suffered from several attacks of delirium tremens, the last of which proved fatal. At the autopsy, the membranes of the brain were found to be highly congested, and in some parts they were inflamed. On the inner surface of one of the parietal bones, was discovered a projecting knob the size of a bean, which I believe was the cause of the epilepsy from which she had primarily suffered. The coexistence of epilepsy and delirium tremens is a circumstance of much interest, and is not of frequent occurrence in epileptics who are in the habit of drinking. It, however, proves that the peculiar condition of the brain, whatever that may be, which gives rise to the epilepsy, is not antagonistic to the induction of other phenomena, such as are witnessed in delirium tremens.

Dr. GIBB, 16th of April, 1861.

16. *Case of chronic hydrocephalus after birth.*

The brain exhibited was removed from a child nearly twelve months old. The parents exhibit no symptoms of syphilis, the mother seems healthy, the father consumptive; they have had only one other child, which died in the fourth month from "convulsions."

C. B., a female child, was born without difficulty, and was well formed. When five months old, it was observed to have a rather large head. At the end of the sixth month, in August, 1860, Dr. Rasch, who has kindly furnished me with his notes, found the head much enlarged, the fontanelles and sutures widely open, the forehead very prominent, the eyes turned downwards, so as to conceal the greater

part of the cornea behind the lower lid, the veins of the forehead greatly distended, and the face, in proportion to the upper part of the head, very small, giving to the front part a triangular shape, with the point downwards. The circumference of the head was twenty inches and a-half, the distance from the upper insertion of one ear to that of the other twelve inches, that from the root of the nose to the occipital protuberance fourteen inches and three-quarters. The child appeared otherwise healthy; the limbs were well shaped; intelligence seemed not to be defective; the child smiled and took notice of its parents; it was observed to move the head much from side to side; it took the mother's breast very eagerly, was often sick, and had been so from birth. On January 16th, 1861, after admission into the German Hospital, the circumference of the head was increased to twenty-three inches and a-quarter, the distance from ear to ear to seventeen inches and three-quarters, that from the root of the nose to the occipital protuberance to seventeen inches. Other methods of treatment having failed, six ounces of fluid were removed by puncture on the left side of the large fontanelle, and slight compression was applied afterwards. The fluid was of the colour of water, of neutral reaction, specific gravity 1·0025, containing no sugar, only traces of albumen, and a small amount of saline matter, which consisted principally of chlorides. Within a few days after the operation, the fluid had again so far collected as to distend the head to its former dimensions. Soon, vomiting, twitching of hands and feet, with increased frequency of pulse, came on; later, tonic contraction, first of the arms, then of the legs, and also of the masticatory muscles, causing trismus, supervened; congestion of both conjunctivæ took place, gangrene of the surface wherever it was exposed to pressure, and death on February 20th, *i.e.*, five weeks after the puncture. The circumference of the head had, during the last few weeks, somewhat decreased, rendering the integuments rather flaccid.

Post-mortem examination.—The body of the child is emaciated, weighing only nineteen pounds eight ounces avoirdupoise. The circumference of the head is twenty-two inches and a-half, the distance from ear to ear fourteen inches and a-quarter, that from the root of the nose to the occipital protuberance sixteen inches. There is nowhere any indication of the closing of the sutures. The bones of the cranium are extremely thin, the parietal and frontal bones offering many insulated spots of defective ossification. The dura mater is normal, there is no fluid between this membrane and the arachnoid, and only a very small amount in the subarachnoid space.

The division of the brain into two hemispheres is still perceptible. The convolutions on the anterior part of the upper surface are quite effaced, while they are still more distinct on the posterior part. The brain-substance forming the roof of the ventricles, especially on the right side, is so thin, that a slight scratch opens the ventricle. The first portion of the fluid which escapes from this opening, is transparent, and of pale-yellow colour, while the portion flowing out last is thick and purulent, the reaction being alkaline. The whole amount of fluid, contained in the ventricles, weighs seven pounds eight ounces; the whole encephalon, including cerebellum and medulla oblongata, weighs rather more than seven ounces and a-half. The fluid weighs, therefore, almost sixteen times as much as the brain, and it furnishes considerably more than the third part of the weight of the whole body (including the fluid itself). When allowed to stand for twelve hours, the fluid separates into a transparent portion, forming about three-fourths of the whole, and a pus-coloured deposit. The transparent portion is of pale-yellow colour, has a spec. grav. of 1.017, and forms a thick coagulum with nitric acid, and by boiling. The upper part of the deposit is of jelly-like consistency, similar to the coagulum of some inflammatory exudations, the lower portion is very tenacious. The spec. grav. of the entire fluid, mixed, is 1.019. Under the microscope the gelatinous portion exhibits an almost homogeneous fluid, with the most delicate, scarcely perceptible web of fibrils, some fat globules, and cells like pus corpuscles. The lower portion of the deposit contains pus cells in various stages of development, fat globules of different sizes, some large epithelial cells and many granules.

There is great difficulty in identifying the different portions of the brain. The lateral and third ventricles are enormously distended, forming a single cavity. The anterior part of both lateral ventricles is more distended than the posterior; the right ventricle more than the left; on the left side the middle cornu and the posterior can be traced, on the right only the posterior. In the posterior portion of the right ventricle there is a large abscess beneath the lining membrane, filled with tenacious pus, part of which escapes during the examination through an ample opening. The lining membrane of the ventricles is of considerable thickness, exceeding even the layer of brain-substance covering it on the anterior part of the right hemisphere. The corpus callosum can only be very faintly traced, the fornix and the pineal gland not at all. The site of the corpora striata and optic thalami is flat, the grey substance seen on the cut surface is very scanty. There are only two commissures between these bodies, probably the anterior

and the middle: they are thin and lengthened. The corpora quadrigemina are represented by a mere round bag, from which the short iter a tertio ad quartum ventriculum is distinctly seen to be permeable, but only moderately distended; the fourth ventricle, too, being only very slightly, or not at all, larger than usual. The inspection of the brain from below exhibits, instead of the corpora albicantia and the infundibulum, only a single large cavity with very thin walls. The crura cerebri, the pons and the medulla oblongata are of normal shape and consistency, but are rather small.

The left hemisphere of the cerebellum is atrophied, being less than half the size of the well-shaped right hemisphere. The subarachnoid space of the left hemisphere is occupied by purulent fluid.

There are no other malformations in the body.

The organs of the chest and abdomen offer nothing abnormal, with the exception of congestion of the lower lobes of both lungs.

Remarks.—1. The case scarcely permits the formation of a decided opinion, as to whether the alterations observed in the different portions of the brain, were merely the effect of absorption, in consequence of the effused fluid; or whether the effusion was preceded by an imperfect development of some portions of the encephalon. The latter view appears, however, the more probable, on account of the absence of the fornix, the pineal gland and the third commissure, and it is strengthened by the atrophic condition of the left half of the cerebellum.

2. The whole brain is, as Dr. Peacock remarked at the meeting of the Society, atrophied, the weight of seven ounces and a-half being very considerably below the average, even if the emaciation of the body is taken into account. The average weight of the brain of a female child between one and two years of age is, according to Dr. Peacock,* thirty-one ounces and one-third of a drachm avoirdupoise; in a female child, ten months old, which died from pneumonia, and was examined by myself, the weight of the brain was thirty-two ounces avoirdupoise. The proportion of the weight of the whole body to that of the brain, in five female children between one and five years of age, recorded by Dr. Peacock, was about 9 to 1; in the child of ten months, just mentioned, $8\frac{1}{2}$ to 1. In the case before the Society the proportion is about 41 to 1; and if the cerebral fluid is abstracted from the weight of the body, about 25 to 1. The atrophy of the brain is, therefore, evident. This relation seems not to be generally observed in such cases, as Dr. Cop-

* On the Weight of the Brain at different periods of Life, &c. "London Journal of Medicine," No. XXVI., pp. 105-108, 1851.

land in his article on the subject states: "The brain, however, does not appear to be diminished by interstitial absorption, as its weight is not materially less than the healthy brain at the same age.*"

3. The fact that the fourth vnticle was only slightly or not at all distended, in spite of the permeability of the aquæductus Sylvii, appears rather remarkable. Considering only the very dilated condition of the third, and the normal appearance of the fourth ventricle, and of the central canal of the spinal marrow, the idea suggested itself, that the communication between the third and the fourth ventricle might be closed, but careful examination distinctly showed this not to be the case.

4. With regard to the treatment of such cases, the important organic alterations in the brain and its cavities render the possibility of success from whatever method of treatment very doubtful.

5. The comparison of the fluid removed by the puncture during life with that contained in the ventricles after death is of interest, as exhibiting the great change caused in the fluid through the inflammatory process following the puncture. The former fluid has the usual character of the fluids found in chronic dropsy of the ventricles, viz.:—low specific gravity, and almost complete absence of albumen and solid constituents; while the fluid obtained after death manifested the phenomena of inflammatory exudation, viz.:—higher specific gravity, richness in solid constituents, especially albumen, the presence of pus globules, and even the tendency to coagulation.

Dr. HERMANN WEBER, *7th of May, 1861.*

17. *On the weight and specific gravity of the brain.*

In 1847,† I published a series of weights of the human brain, collected at the Royal Infirmary of Edinburgh, together with tables prepared from these observations, as well as the much larger number of weights previously recorded by the late Professor John Reid.‡ The observations which follow have been obtained since that time, and though comparatively few in number, yet as they are not likely to be materially increased and may furnish an useful comparison with the former, I have thought them worthy of being placed on record.§ The observations on the specific gravity of the brain are entirely new. They were

* "A Dictionary of Practical Medicine," Vol. I. p. 679, 1858.

† "Edinburgh Monthly Journal," Vol. VII. (N.S. Vol. I.) 1847. ‡ *Ibid*, 1843.

§ Some of these have been previously published, but no calculations have been based upon them. "London Journal of Medicine," Vol. I., 1851.

obtained by a different mode from that followed by Dr. Sankey,* in his observations of the specific gravity of healthy brain, and by Dr. Bucknill † in his investigation of the density of the brain of insane persons. The former of these observers ascertained the specific gravity of the different portions of the brain by placing pieces in solutions of common salt of different densities; the latter adopted a similar plan, but employed solutions of Epsom salts. My own observations were made by first weighing the brain and its several portions in air, and then in distilled water, and calculating the specific gravity by the common formula, viz., as the weight lost by the brain in water, is to the weight in air, so is the specific gravity of distilled water (1,000), to the weight required.

* "Brit. and For. Med. Chir. Review, Vol. XI., 1853, p. 240.

† "Lancet," 1852, Vol. II. p. 588; and "Brit. and For. Med. Chir. Review," Vol. XV. p. 207.

TABLE I.

Weight of Healthy Brain, &c., and Cause of Death in Males and Females.

MALES.

No.	Age.	Weight of						Cause of Death, &c.				
		Whole Body.		Encephalon.		Cerebrum.	Cerebellum.		Pons Varolii & Medulla Ob-longata.			
		lbs.	oz.	oz.	dr.	oz.	dr.	oz.	dr.	oz.	dr.	
1	2	24	0	43	7	38	6	4	8	0	9	Burn; died in 21 days.
2	2	...		37	0	...		...	...	...	...	Malformation of heart.
3	2½	31	8	47	0	42	0	4	4	0	12	Burn; died in 6 hours.
4	3	25	4	38	1	33	3	4	2	0	12	Burn; 15 days.
5	4	...		50	10	45	8	4	8	0	10	Burn; 12 hours.
6	5	21	0	45	12	40	0	5	0	0	12	Cholera; 6 days; spinal cord 11 dr. 14 grains.
7	10	45	0	47	12	42	0	5	0	0	12	Cholera.
8	11	...		46	0	40	0	5	0	1	0	Fever.
9	14	...		48	12	43	0	5	0	0	12	Fever.
10	15	88	0	50	8	44	0	5	8	1	0	Instant death from injury.
11	15	...		41	10	36	0	5	0	0	10	Phthisis.
12	15	...		49	4	43	8	4	12	1	0	Malformation of heart.
13	16	...		43	8	38	0	5	8	...	...	Fever.
14	20	...		37	0	32	4	4	0	0	12	Malformation of heart.
15	21	119	0	51	0	...		...	...	...	...	Phthisis; fatal by hæmoptysis.
16	24	...		47	8	41	8	5	4	0	12	Fever.
17	24	97	0	46	1	40	4	4	12½	0	12½	Phthisis.
18	25	...		48	8	42	0	5	8	1	0	Fever.
19	21	121	0	51	0	45	0	5	0	1	0	Cholera.
20	29	...		52	0	46	0	5	0	1	0	Cholera and diseased heart.
21	29	...		49	3½	43	0½	5	2½	1	1	Lumbar abscess.
22	30	...		59	8	53	0	5	8	1	0	Fever.
23	33	...		48	8	42	0	5	8	1	0	Pleuro-pneumonia.
24	32	...		48	0	...		...	...	...	...	Morbus cordis.
25	37	99	0	49	0	43	0	5	0	1	0	Fever and erysipelas.
26	40	106	0	47	0	...		...	...	...	...	Phthisis; fatal by hæmoptysis.
27	42	...		46	8	41	0	4	10	0	14	Chronic diarrhœa.
28	45	...		52	12	45	8	6	4	1	0	Phthisis.
29	48	...		50	6	43	10	5	10	1	2	Morbus hepatis, ascites.
30	51	...		45	0	39	8	4	8	1	0	Bronchitis and diseased heart.
31	50	...		56	4	50	0	5	8	0	12	Erysipelas and diseased heart.
32	55	84	0	45	15	39	11	5	5	0	15	Carcinoma of Pelvis.
33	60	...		51	0	45	0	5	0	1	0	Cholera.
34	65	...		47	6	41	4	5	6	0	12	Intus-susception and diseased heart.
35	70	...		42	4	37	0	4	8	0	12	Morbus cordis et hepatis.
36	78	...		48	0	42	0	5	0	1	0	Injury of head and diseased heart.

FEMALES.

No.	Age.	Weight of						Cause of Death, &c.				
		Whole Body.		En-cephalon.		Cerebellum.			Pons Varolii & Medulla Ob-longata.			
		lbs.	oz.	oz.	dr.	oz.	dr.	oz.	dr.			
1	7 days	7	0	14	1	12	13	1	0 $\frac{1}{4}$	0	3 $\frac{3}{4}$	Medulla spinalis, 2 $\frac{1}{2}$ drchs.
2	1 year	15	0	31	8	27	0	4	0	0	8	Phthisis.
3	3	22	0	39	10	34	8	4	8	0	10	Burn; 1 day.
4	3	22	0	34	10	30	8	3	11	0	7	Burn; 4 hours.
5	5	28	0	41	8	36	8	4	4	0	12	Cholera; 1 day.
6	6	...		51	0	45	8	4	12	0	12	Burn; 14 hours.
7	11	36	0	44	6	38	8	5	0	0	14	Cholera.
8	13	46	12	37	8	32	8	4	4	0	12	Fever.
9	19	...		45	0	39	0	5	0	1	0	Cholera.
10	19	...		44	4	37	8	5	8	1	4	Cholera and Malformation of heart.
11	19	74	0	42	5	37	6	4	3 $\frac{1}{4}$	0	11 $\frac{3}{4}$	Phthisis.
12	19	...		46	12	41	0	5	0	0	12	Fever.
13	20	...		49	0	43	0	5	0	1	0	Fever.
14	22	...		44	6	39	0	4	6	1	0	Fever.
15	30	...		46	0	40	0	5	0	1	0	Cholera.
16	36	104	8	43	0	37	8	4	8	1	0	Delirium tremens.
17	41	112	0	39	1 $\frac{1}{2}$	33	10 $\frac{1}{4}$	4	11 $\frac{1}{4}$	0	12	Phthisis laryngea.
18	42	119	0	42	10	36	15	4	12	0	15	Carcinoma of liver, lungs, &c.
19	56	120	0	47	12	41	15	4	13	1	0	Cancer of breast.
20	56	115	0	48	4	42	2	5	3	0	15	Diseased heart.
21	76-	...		44	6	38	6	5	0	1	0	Strangulated hernia and diseased heart.

Weight of Diseased Brains.

MALES.

11	38	0	56	4	50	0	5	4	1	0	Chorea; 6 weeks.
12	...		53	0	...		...		...		Convulsions.
23	78	0	41	3 $\frac{3}{4}$	35	1	5	3	0	13 $\frac{3}{4}$	Phthisis, meningitis—malformation of heart.
27	116	12	46	5 $\frac{1}{2}$	40	0	5	6	0	15 $\frac{1}{2}$	Acute meningitis.
33	...		54	0	...		...		...		Apoplexy; 3 days, morbus cordis.
62	...		39	12	35	0	4	4	0	8	Softening—morbus cordis et Renum.

FEMALES.

1 $\frac{3}{4}$ yrs.	13	8	31	0	27	0	3	8	0	8	Hydrocephalus.
24	...		42	8	37	0	5	8			Oto-Meningitis.
70	...		43	0	...		...		...		Apoplexy & diseased heart.

TABLE II.

Weight and Specific Gravity of Healthy Brain, &c., with Cause of Death, in Males and Females.

MALES.

No.	Age.	Cause of Death.	Height.		Weight of Body.	Weight in Air.		Specific Gravity.	
			ft.	in.		oz.	dr.		
1	21	Morbus Renum and Dropsy	5	10	...	Cerebrum	43	4	1,0362
						Cerebellum	5	7 $\frac{1}{2}$	1,04219
						Pons Varolii and Medulla Oblongata	0	15 $\frac{3}{4}$	1,0351
						Encephalon	49	11 $\frac{1}{4}$	1,0364
2	26	Ulceration of Intestines	5	10	105	Cerebrum	41	14	1,0381
						Cerebellum	5	10	1,0448
						Pons Varolii and Medulla Oblongata	0	13	1,0461
						Encephalon	48	5	1,0392
3	28	Morbus Renum ; Phthisis	5	7	104	Cerebrum	43	7 $\frac{1}{2}$	1,03089
						Cerebellum	5	6 $\frac{1}{2}$	1,0403
						Pons Varolii and Medulla Oblongata	0	13 $\frac{1}{4}$	1,0389
						Encephalon	49	11 $\frac{1}{2}$	1,03211
4	33	Phthisis .....	...	...	...	Cerebrum	40	13	1,03718
						Cerebellum	5	7	1,04382
						Pons Varolii and Medulla Oblongata	0	12 $\frac{3}{4}$	1,03821
						Encephalon	47	0 $\frac{3}{4}$	1,03754
5	35	Diseased Hip	5	6	78	Cerebrum	41	10 $\frac{1}{4}$	1,0374
						Cerebellum	5	7 $\frac{1}{2}$	1,0418
						Pons Varolii and Medulla Oblongata	1	1 $\frac{1}{4}$	1,0428
						Encephalon	48	3 $\frac{1}{4}$	1,0383
6	35	Phthisis	5	5	63	Cerebrum	37	3 $\frac{1}{2}$	1,0341
						Cerebellum	4	10 $\frac{1}{2}$	1,0382
						Pons Varolii and Medulla Oblongata	0	14	1,0392
						Encephalon	42	12	1,0347
7	37	Abscesses & Secondary Deposits in Lungs, &c.	5	7	90	Cerebrum	38	12	1,0343
						Cerebellum	4	12	1,0419
						Pons Varolii and Medulla Oblongata	0	13	1,0400
						Encephalon	43	9 $\frac{3}{4}$	1,0352
8	44	Phthisis	5	8	91	Cerebrum	36	2	1,0357
						Cerebellum	5	7 $\frac{1}{4}$	1,0369
						Pons Varolii and Medulla Oblongata	0	13	1,0366
						Encephalon	42	6 $\frac{1}{2}$	1,0357
9	59	...	5	6	100	Cerebrum	34	7 $\frac{1}{2}$	1,03031
						Cerebellum	4	6	1,0447
						Pons Varolii and Medulla Oblongata	0	12	1,0434
						Encephalon	39	9 $\frac{1}{2}$	1,0350

TABLE II.—Continued.
Specific Gravity of Healthy Brain in Females.

No.	Age.	Cause of Death.	Height.		Weight of Body.		Weight in air.		Specific Gravity.
			ft.	in.			oz.	dr.	
1	8	Burn; four days.....	4	0	56	Cerebrum	42	5 $\frac{1}{4}$	1,0393
						Cerebellum	4	12	1,0482
						Pons Varolii and Medulla Oblongata	0	12 $\frac{1}{2}$	1,04714
						Encephalon	47	13 $\frac{1}{2}$	1,0403
2	8	Abscess of Liver, and diseased Mesenteric glands	3	7	...	Encephalon	39	6	1,0368
3	23	Anasarca	5	7	...	Encephalon	46	0	1,03734
4	24	Fungoid disease of Liver & intestines	5	4	86	Cerebrum	40	7 $\frac{3}{4}$	1,0355
						Cerebellum	5	6 $\frac{3}{4}$	1,0411
						Pons Varolii and Medulla Oblongata	0	15	1,0368
						Encephalon	46	13 $\frac{1}{2}$	1,0362
5	25	Morbus Renum	5	5	99	Cerebrum	35	12	1,0349
						Cerebellum	4	7	1,03807
						Pons Varolii and Medulla Oblongata	0	12	1,0445
						Encephalon	40	15	1,0354
6	66	Phthisis.....	5	4	70	Cerebrum	37	6 $\frac{3}{4}$	1,0351
						Cerebellum	4	15	1,0394
						Pons Varolii and Medulla Oblongata	0	12 $\frac{3}{4}$	1,0405
						Encephalon	43	2 $\frac{1}{2}$	1,0357

Weight and Specific Gravity of Diseased Brain in Males and Females.

MALES.

1	11	Congenital Idiocy...	...	21 $\frac{1}{2}$	Cerebrum	17	2 $\frac{1}{4}$...	
					Cerebellum, and Pons Varolii and Medulla Oblongata	4	1 $\frac{1}{4}$...	
					Encephalon	22	3 $\frac{1}{2}$	1,030	
2	11	Fractured Skull and Injury of Brain	4	2	42	Cerebrum	37	7 $\frac{1}{2}$	1,03907
						Cerebellum	4	13	1,043006
						Pons Varolii and Medulla Oblongata	0	11	1,0469
3	27	Acute Inflammation of Membranes of Brain	5	7	116	Encephalon	42	15 $\frac{1}{2}$	1,0399
						Cerebrum	40	0	1,03225
						Cerebellum	5	6	1,04242
						Pons Varolii and Medulla Oblongata	0	15 $\frac{1}{2}$	1,03333
		Encephalon	46	5 $\frac{1}{2}$	1,0332				

FEMALES.

1	16	Miliary tubercle, Softening of Brain, and effusion	5	2	70	Cerebrum	43	11	1,0406
						Cerebellum	4	10 $\frac{3}{4}$	1,0420
						Pons Varolii and Medulla Oblongata	0	13 $\frac{3}{4}$	1,0371
						Encephalon	49	3 $\frac{1}{2}$	1,0407

Showing the heaviest, lightest, and mean weights of the Encephalon, and of its several portions, in the above observations, in the two sexes, and at different ages.

MALES.

Ages.	Numbers Weighed.				Heaviest.				Lightest.				Mean.																						
	Encephalon.	Cerebrum.	Cerebellum.	Pons & Medulla.	Encephalon.	Cerebrum.	Cerebellum.	Pons and Medulla.	Encephalon.	Cerebrum.	Cerebellum.	Pons and Medulla.	Encephalon.	Cerebrum.	Cerebellum.	Pons and Medulla.																			
																	oz.	dr.	oz.	dr.	oz.	dr.	oz.	dr.											
2 to 4 incl.	5	4	4	4	50	10	45	8	4	8	0	10	37	0	33	3	4	2	0	9	43	3	6	39	14	7	4	5	0	10	7				
5 to 10	2	2	2	2	47	12	42	0	5	0	12	0	45	12	40	0	5	0	12	0	12	46	12	4	41	0	5	0	12	0	12	41	0	12	
10 to 20	7	7	6	6	50	8	44	0	5	8	1	0	37	0	32	4	4	0	10	0	10	45	3	7	39	8	5	4	14	0	13	6	13	6	
20 to 30	11	10	10	10	59	8	53	0	5	10	1	1	46	1	40	4	4	12½	0	12	0	50	4	4	43	14	9	5	4	3	0	14	7	14	7
30 to 50	13	11	11	11	56	4	50	0	6	4	1	2	42	6½	36	2	4	10	0	12	47	14	4	4	41	12	5	5	3	7	0	14	6	14	6
50 to 78	7	7	7	7	51	0	45	0	5	6	1	0	39	9½	34	7½	4	6	0	12	45	9	5	4	39	13	5	4	13	8	0	14	1	14	1
From 20 to 50 yrs.	45	41	40	40	59	8	53	0	6	4	1	2	42	6½	36	2	4	10	0	12	48	15	4	4	42	13	9	5	4	5	0	14	7	14	7

FEMALES.

7 days,	1	1	1	1	41	8	36	8	4	8	0	12	34	10	30	8	3	11	0	7	14	1	1	12	13	1	0	25	0	3	75	0	3	75	0		
1 year,	1	1	1	1	51	0	45	8	4	12	0	12½	39	6	42	5½	4	12	0	12½	38	9	3	31	8	27	0	4	0	8	0	8	0	8	0	8	0
3 to 5 incl.	3	3	3	3	44	6	38	8	5	0	14	4	37	8	32	8	4	4	0	12	46	1	1	46	1	43	14	6	4	12	0	12	0	12	0	12	0
5 to 10	2	2	2	2	49	0	43	0	5	8	1	4	42	5	37	6	4	4	0	12	40	15	8	40	15	43	14	6	4	12	0	12	0	12	0	12	0
11 to 13	2	2	2	2	46	3½	40	7½	5	6½	1	0	40	15	35	12	4	6	0	12	44	11	3	44	11	38	12	9	4	15	0	15	15	0	15	15	0
15 to 20	5	5	5	5	43	0	37	8	4	12	1	0	39	1½	33	10½	4	8	0	12	41	9	1	41	9	36	0	4	11	0	8	0	14	3	14	3	
20 to 30	5	4	4	4	48	4	42	2	5	3	1	0	43	2½	37	6½	4	13	0	12½	45	14	1	45	14	39	15	4	15	7	0	14	9	14	9	14	9
30 to 50	3	3	3	3	46	13½	40	7½	5	6½	1	0	39	1½	33	10½	4	8	0	12	41	9	1	41	9	36	0	4	11	0	8	0	14	3	14	3	
50 to 76	4	4	4	4	48	4	42	2	5	3	1	0	43	2½	37	6½	4	13	0	12½	45	14	1	45	14	39	15	4	15	7	0	14	9	14	9	14	9
From 20 to 50 yrs.	27	25	25	25	46	13½	40	7½	5	6½	1	0	39	1½	33	10½	4	6	0	12	43	9	7	43	9	37	9	4	11	8	0	14	9	14	9	14	9

TABLE IV.

Showing the proportion of the Encephalon to the body, and of the Cerebellum to the Encephalon, in the two sexes, and at different ages, in all the observations.

MALES.			FEMALES.		
Ages.	Encephalon to Body.	Cerebellum to Encephalon.	Ages.	Encephalon to Body.	Cerebellum to Encephalon.
Years.					
2	1 to 8·8	1 to 9·6	7 days	1 to 7·9	1 to 14·07
2½	1 to 10·6	1 to 11·04	1 yr.	1 to 7·6	1 to 7·8
3	1 to 10·6	1 to 9·2	3 yrs.	1 to 7·7	1 to 8·8
5	1 to 7·3	1 to 9·15	3	1 to 8·8	1 to 9·3
10	1 to 15·08	1 to 9·5	5 "	1 to 10·7	1 to 9·7
15	1 to 27·8	1 to 9·1	8 "	1 to 18·3	1 to 10·06
21	1 to 37·9	1 to 10·2	11 "	1 to 12·8	1 to 8·8
21	1 to 37·3	—	13 "	1 to 19·6	1 to 8·5
23	1 to 30·3	1 to 7·9	16 "	1 to 22·7	1 to 10·6
24	1 to 31·9	1 to 9·9	19 "	1 to 27·9	1 to 10·1
26	1 to 33·4	1 to 9·2	24 "	1 to 29·3	1 to 8·7
28	1 to 34·7	1 to 8·5	25 "	1 to 37·9	1 to 9·2
35	1 to 25·8	1 to 8·8	36 "	1 to 38·6	1 to 9·5
35	1 to 23·5	1 to 9·2	41 "	1 to 45·8	1 to 8·3
37	1 to 32·3	1 to 9·8	42 "	1 to 44·6	1 to 8·9
37	1 to 33·05	1 to 9·17	56 "	1 to 40·02	1 to 9·9
40	1 to 36·08	—	56 "	1 to 38·1	1 to 9·3
44	1 to 34·6	1 to 7·7	66 "	1 to 25·9	1 to 8·7
55	1 to 29·2	1 to 8·6	— "	—	—
59	1 to 44·4	1 to 9·04	— "	—	—
From 21 to 44 incl. Mean of 12 obs., extremes.	1 to 32·73, 1 to 23·5, and 1 to 37·9	(10 observ.) 1 to 9·03 1 to 7·7 and 1 to 10·2	From 24 to 42 incl. Mean of 5 obs. extremes.	1 to 39·2, 1 to 29·3, and 1 to 45·8	1 to 8·9 1 to 8·3 1 to 9·5

TABLE V.

Showing the highest, lowest and mean specific gravity of the Encephalon, and its several portions, in adults.

MALES.					
	Number of Observations.	Ages.	Highest.	Lowest.	Mean.
Cerebrum	9	21 to 59	1·0381	1·03031	1·03488
Cerebellum	9		1·0448	1·0369	1·04162
Pons Varolii and Medulla Oblongata	9		1·0461	1·0351	1·04006
Encephalon	9		1·0392	1·03211	1·03623
FEMALES.					
Cerebrum	3	23 to 66	1·0355	1·0349	1·0351
Cerebellum	3		1·0411	1·03807	1·03952
Pons Varolii and Medulla Oblongata	3		1·0445	1·0368	1·0406
Encephalon	4		1·03734	1·0354	1·03616

The general results to be deduced from the above observations and tables are :—

1. The weight of the brain in the adult male averages about forty-nine ounces avoird., and ranges from about forty-two to nearly sixty ounces.

In the adult female the weight of the brain averages about forty-three ounces and a-half, and ranges from thirty-nine to nearly forty-seven ounces. The mean difference is thus about five ounces and a-quarter.

In the previous series of observations,* which greatly exceeded in number that now published, the male encephalon had an average of about fifty ounces; the female of nearly forty-five ounces, or a difference of nearly five ounces and a-quarter, and the range was in both sexes more extensive.

The average weight of the encephalon in these calculations corresponds, therefore, sufficiently with the previous results, as well as with those obtained by Dr. Reid, and does not differ greatly from the conclusions of Sir W. Hamilton, Dr. Sims, and Dr. Clendinning. The average weight of the brain, as deduced by these observers, ranges from forty-five ounces and three-quarters to fifty ounces and a-quarter in males, and from forty-one ounces and a-quarter to forty-five ounces in females. The observations of Portal, Tiedemann, M. Lelut, and M. Parchappe are also similar.

2. The encephalon increases in weight up to adult age, and again declines in advanced life. This fact is, from their comparatively small number, less satisfactorily illustrated by the observations now published than by the previous series and by the observations of Dr. Reid and Dr. Boyd.† In a table published in 1851,‡ embracing the whole of Dr. Reid's observations and my own up to that date, it is very clearly shown, that, though the brain of young persons is occasionally found to be very heavy, it does not usually obtain its full development till between twenty and thirty years of age, and undergoes a decided decline in weight in advanced life.

3. The proportion which the whole encephalon bears to the body varies greatly according to the state of obesity or emaciation of the subject, but it generally decreases with the advance of life. In the adult male, aged from twenty-one to forty-four inclusive, the mean proportion was as 1 to 32·73, and the range from 1 to 23·5 to 1 to 37·9. In the adult female from twenty-four to forty-two years of age, the mean was 1 to 39·2, and the range 1 to 29·3, and 1 to 45·8.

* See Paper in "Edinburgh Monthly Journal," Vol. VII., 1847.

† "Wagner's Physiology," by Willis, 1844, Appendix, p. 700.

‡ "London Journal of Medicine," Vol. I.

4. The cerebellum bears much the same relation to the whole encephalon throughout the duration of life, at least after very early age. In the adult male it averaged 1 to 9.03, and ranged from 1 to 7.7 to 1 to 10.2. In the adult female it averaged 1 to 8.9, and ranged from 1 to 8.3 to 1 to 9.5.

5. The specific gravity of the brain in the adult is similar in the two sexes (1.036 in both the male and female); nor is there any very material difference in the density of the several portions of the encephalon; the specific gravity of the cerebellum and of the pons Varolii and medulla oblongata being, however, in both sexes, greater than that of the cerebrum. The observations do not afford satisfactory information as to the influence of age on the specific gravity of the brain.

6. The observations in the weight and specific gravity of the diseased brain are too few to warrant any conclusions being deduced from them; but there can be no doubt, that the brains of persons who die of inflammatory diseases of that organ, or of diseases which interfere with the free transmission of the blood through the lungs and occasion general venous congestion, are usually heavier than those of persons who die of other affections.

Dr. PEACOCK, 7th of May, 1861.

II.—DISEASES, ETC., OF THE ORGANS OF RESPIRATION.

1. *Millstone-makers phthisis.* *Siliceous matter found in the lungs.*

In the *British and Foreign Medical Review* for January 1860, Dr. Peacock drew attention to the great liability to pulmonary disease in the men employed in manufacturing millstones from a siliceous stone known as the French burr. The following case, which occurred in St. Thomas's Hospital during the summer of 1860, affords an example of the form of disease to which these workmen are liable, and is further particularly interesting from the circumstance that considerable quantities of siliceous material were detected in the lungs on chemical and microscopical examination.

R. J., æt 48, a French millstone-maker or builder, was admitted into St. Thomas's Hospital on the 3rd of August, 1860. He had been previously an out-patient under Dr. Peacock, and stated that he had been suffering more particularly since the previous October, but had had cough, expectoration and difficulty of breathing, especially during winter, for three years. The following are the notes of the case. He served his apprenticeship to the milling business, but about ten years ago commenced to work at the millstone-making, and has continued to do so ever since.

He considers himself to have been regular in his habits, having only taken two or three pints of beer daily and occasionally spirits. His illness commenced with cold, and he has since got gradually worse, suffering however much more seriously during winter. He has spat blood occasionally but only in streaks, and never before the last year.

He complains of cough and expectoration, and the sputum is copious, massive, muco-purulent, viscid, and of a dark colour; sometimes almost black. He has considerable difficulty in breathing, has lost much flesh, and is thin and old-looking for his age. His appetite and digestion are defective, the bowels are regular, and he has night perspirations. His pulse is very feeble but not materially accelerated.

The resonance on percussion is defective in all parts of the chest, and the movements are very imperfectly performed. The deficiency is most marked at the apices, and there is sibilant and sonorous rhonchus in all parts, but especially at the upper portions.

On admission, a mustard poultice was applied to the chest, and he had an expectorant and anodyne mixture, and anodyne pills at night, with the mixed diet. On the 6th, two drachms of the *ol. Morrhuæ* were prescribed with the cinchona and acid mixture, and on the 13th he was directed to take a draught of ether and ammonia at intervals, and to have a glass and a-half of brandy, increased on the 23rd, to two glasses. He, however, gradually became weaker, suffered from diarrhoea, and died on the 30th.

From the difficulty of obtaining the consent of the friends of the patient, the *post-mortem* examination did not take place till the 1st of September, fully fifty hours after death, and the body was consequently much altered by decomposition.

The lungs were firmly adherent to the parietes, especially at the upper parts of the chest, where there were very thick and firm attachments. Both lungs were throughout sparingly crepitant, and at the apices were much contracted, solid, and of a dark colour—no tubercles were found in any part, but there were numerous hard, black, gritty masses, about the size of a split-pea, embedded in the tissue, more particularly at the apices and at the right side. The inferior part of the left lung was in the state of pneumonic condensation, passing into suppuration.

The larynx and trachea were dilated, and the mucous membrane was throughout thickened, but free from ulceration. The follicles on the under surface of the epiglottis were enlarged. The bronchial mucous membrane was much reddened, probably partly the result of imbibition from decomposition, but there was not any material increase

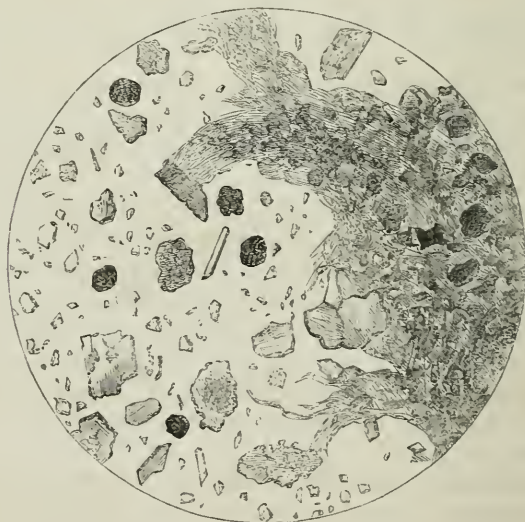
of secretion, except in the smaller tubes. These were also throughout dilated. The bronchial glands were very large, dark coloured and solid, but not tuberculous.

The heart was considerably enlarged and its cavities dilated, especially the right auricle and ventricle, but the walls were not hypertrophied, and the right ventricle had some fat on its surface. The muscular substance was very flaccid, and the inner surfaces of the cavities and of the aorta were deeply dyed from decomposition.

The liver, spleen and intestines were free from disease. The kidneys were large, flaccid and congested, but did not apparently contain deposit.

Portions of the hard, gritty matter from the apex of the right lung were picked out, placed in the flame of a spirit-lamp till they were reduced to a white ash, and then boiled repeatedly in nitric acid. The residue, which was considerable in quantity, was then placed under a microscope. It proved to consist of sharp, angular, granular matter, which, except as to its greater fineness, bore a close resemblance to the dust collected in the workshops in which the millstones are prepared.

WOODCUT 1.



Represents a portion of the lung teased out with needles. The pulmonary tissues are seen to be obscured by excess of adherent carbonaceous material. Magnified 200 diameters.

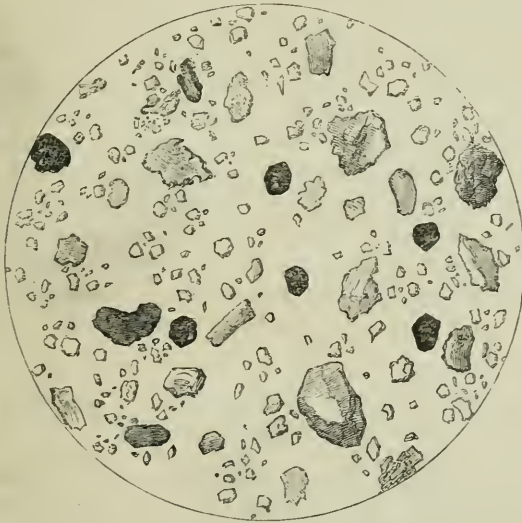
The microscopic drawings and preparations, exhibited to the Society, were made by Mr. Tuffin West, and displayed :—

1. The lung tissue teased out in water so as to show particles of mineral matter contained in the tissue ;
- 2 and 3. The same in glycerine and Canada balsam ;
4. The gritty matter, after maceration of the tissue in nitric acid for some hours ; and
5. The dust from the workshops.

The figures published in the "Transactions" exhibit the microscopic appearance of the first and fourth of these preparations.

Dr. Peacock remarked, that in applying the term phthisis to this form of disease, he used it in a wider sense than that in which it was

WOODCUT 2.



Represents siliceous and some carbonaceous particles from the lung, after twenty-four hours action of cold nitric acid. Magnified 200 diameters.

ordinarily employed. He believed that when a person, predisposed to tubercular disease, was brought up from early life to the millstone-making, the irritation caused by the inhalation of the gritty particles might excite true tubercular phthisis, as in the case of S. S., described in his former paper in the *British and Foreign Medical Review*.

But that when there was no special tuberculous predisposition, the irritation would give rise to chronic bronchitis and pneumonia—the condition often described as broncho-pneumonia—in which the lung would become consolidated, and might ultimately undergo ulceration with the production of cavities, but without any deposit of true tubercle. This had occurred in the instance now related, and in the case of J. C., described in his former paper. In these respects, the disease was very similar to that excited by the occupation of dry-grinding in the Sheffield cutlery-workers. Dr. Peacock has shown that the men employed in the French millstone-making rarely live beyond the age of 40, and his recent experience is confirmatory of the same fact; but, while he ascribes much to the inhalation of the gritty particles, he regards the unhealthiness of the occupation as greatly aggravated by other unfavourable hygienic influences, especially the habits of intemperance in the men and the defective condition of their workshops. He believes, that provided the men did not commence to work at the manufacture till after they had attained their full growth, they would suffer much less; but in the present instance, the patient was fully 28 years of age before he entered upon the work, and had not been very intemperate, yet his age at death scarcely exceeded that of the men who are apprenticed to the trade. The longevity of the millstone-makers differs very greatly from that of the men employed by the same manufacturers in wire-weaving, &c., the latter attaining apparently the full duration of human life, though, so far as the workshops are concerned, they are placed in less favourable sanitary conditions.

Dr. PEACOCK, 16th of November, 1860.

2. *Case of pneumo-thorax, resulting from the opening of a vomica during the progress of pleuritis.*

A muscular, healthy-looking, young soldier, in the Fusilier Guards, æt. 26, was admitted into Hospital on the 2nd of November, complaining of severe pain in the right lumbar region, increased much on any movement or inspiration. The pain was stated to have occurred immediately after an effort made in carrying a sick comrade down stairs. No constitutional disturbance of any kind was present at the time of admission.

A mustard poultice, a dose of Dover's powder, and an aperient in the morning were ordered; and the next day he declared that the pain had quite disappeared, and that he felt well. He had not complained of any cough; but some thick mucous expectoration, tinged with blood,

was observed in a cup; and this circumstance, together with the existence now of slight pyrexia and dyspnoea—reluctantly admitted by the patient—led to an examination of the chest. Dulness—confined to the lower third of the right lung—with occasional slight friction sounds and distant respiratory murmur, led to the diagnosis of pleurisy with slight effusion. The disease was considered to be of a sub-acute form, and although the physical development was good, the man's face was rather pallid and his pulse weak. The pain having disappeared, it was not thought advisable to lower the system by any depletion. Two grains of calomel, with two of Dover's powder, were given thrice a-day with a diaphoretic mixture. No change of importance occurred until the 7th. The man continued each morning to assert that he felt well, but on being pressed by questions, he admitted that he felt short of breath. The expectoration consisted of thick tenacious mucus in small quantity, and streaked with blood. He appeared to cough very little, but was rather restless and nervous; circumstances attributed rather to his irregular habits of life before admission. His bowels during this interval had been rather purged, and on the 4th, an additional grain of Dover's powder had been added to each pill, but without much apparent effect. On the 7th, although his own statement continued as favourable, he was, decidedly, not so well as before. The dyspnoea was increased, sputa more copious, frothy, but free from discoloration, pulse feeble, surface of body rather cold, with tendency to perspiration. There was increased dulness—varying with change in position—and absence of respiration to an increased extent at the base of the right lung, together with bronchial respiration throughout the remainder of the organ, posteriorly. Bronchial respiration, of the same character, was also audible in the other lung, posteriorly. The patient said he could lie equally well on both sides, and, at my request, changed his position before repeating his assertion. He made the same statement from the commencement to the termination of his illness. Very slight mercurial action had commenced, and, notwithstanding the addition of opium, the bowels continued to act rather too freely. The mixture was omitted, mercurial inunction every night, and an addition to the quantity of opium in the pills, were ordered, and strong beef-tea administered. It appears that no important change in his state occurred during the day; and, about six o'clock he got up to have his bed made, and returned to it, without any complaint of feeling worse than usual. Shortly after, my colleague (Mr. Elkington) when passing through the ward, observed him to be in a state of collapse, the skin cold, and bedewed with damp perspiration, respiration hurried, and pulse extremely feeble. He rallied very slightly

under the free administration of brandy and ammonia. In the morning of the 8th when I saw him, he was almost moribund, face livid, body cold and covered with damp perspiration, respiration quick, but not laboured. He expired an hour after. He had not complained to the orderly of any change for the worse when returning to bed; nor, it seems, were any symptoms of distress present then to attract the notice of the attendant, or other patients.

Autopsy.—On examination the following day, the right side of the chest, well developed, was found abnormally resonant on percussion throughout. When the sternum was raised, an escape of air took place from the affected locality.

The *right* lung, compressed to a very small size, and its lobes quite flattened, rested close to the spine. About a pint of clear straw-coloured serum was found at the bottom of the large sac, formed by the severance of the pleura and voidance of space by the lung. A thick layer of false membrane, evidently of old formation, but presenting on its surface a lining of fresh lymph, stretched from the wall of the chest obliquely down to the viscus. At the apex, firm adhesions to the parietes of the chest existed; and, a little lower, where the lung is freed from its attachment to false membrane, a fistulous ulcer communicating with a tubercular cavity in the apex was found. No pus escaped on pressure, but a probe passed freely round the walls, which appeared capable of containing a walnut. Posterior to the vomica, a cluster of tubercles, in different stages of development, but chiefly consisting of the cheesy-substance observable in scrofulous disease of the glands, occupied the rest of the apex. Some of these scrofulous deposits were softening, and others had caused the formation of small cavities. The remainder of the lung, dense in structure and impervious to air, seemed tolerably healthy. The *left* lung presented much the same morbid appearances in the apex as the right; and, like it, the rest of the organ was tolerably healthy, a few miliary tubercles only being present. This lung, however, was much congested, and several dark spots of extravasation as large as a sixpence were met with.

The left ventricle of the heart, somewhat hypertrophied, was filled with polypi, together with semi-fluid blood. The liver and kidneys were congested, and the first-named organ, enlarged, stretched across the epigastrium, and somewhat displaced the stomach.

Remarks.—This case is one of those, not infrequently met with, where disease is found after death which, from the absence of prominent symptoms, has been unsuspected during life. The man, as I have

stated, was robust, muscular, and tolerably healthy in appearance. During his five years' service, he had been very seldom in Hospital, and then only for trifling ailments; never for any chest complaint. When admitted, there was no constitutional disturbance, the pain was referred to the lumbar region, and these circumstances, together with the man's statement of the origin,—a strain in lifting a sick comrade into a cab—seemed, at first sight, to indicate that the affection was merely a muscular one.

Effusion to a small extent, and resulting from sub-acute pleuritis, was diagnosed, when, although the patient declared himself well, his too frequent breathing led me to examine his chest. The distinctness of respiration over a large space indicated that the effusion was inconsiderable. I confess, however, that the presence of tubercles never occurred to my mind, so much at variance was such disease with the man's history and appearance. The expectoration certainly presented no appearances pathognomonic of the existence of softened tubercles. It was not purulent but homogeneous, very tenacious, and contained, apparently, no tubercular matter. The blood discolouring it, and its adhesiveness, made it resemble rather pneumonic sputa. The additional work devolving on the right lung seemed, to me, to account for the nature of the expectoration. Moist râles were found in this lung, posteriorly; together with loud bronchial respiration during the first two days of illness.

The adhesions at the apex of the right lung seemed to have become partly detached—probably owing to some effort made by the patient in getting out of bed—and the fistulous aperture was thus afforded free vent into the pleural sac. When the passage of air took place, the lung must have become paralyzed very rapidly. The vomica appeared to have been empty, as no trace of pus was evident in the effused fluid.

Apart from the pleuritic affection, the case seems to me one that might afford some grounds for a favourable prognosis; and I should wish to hear the opinions of any gentlemen as to whether Nature might not be capable of accomplishing gradually the elimination of the morbid deposits—circumscribed as they were,—and of effecting cicatrization?

The patient certainly seems to have enjoyed very tolerable health, whilst Nature was in process of effecting the removal of the scrofulous matter, with little apparent interference with the nutritive or other functions.

Dr. ROBINSON, 20th of November, 1860.

3. *Two specimens of malignant disease of the larynx.*

In the first, a case of epithelial cancer, the entire mucous membrane lining the interior of the thyroid cartilage is involved in, or replaced by, diseased structure of varying thickness, which almost fills the cavity of the larynx. The surface of the growth is irregular and ulcerated. The vocal cords have completely disappeared, and the arytenoid muscle has been destroyed, so that the larynx communicates, by a large gap between the arytenoid cartilages, with the pharynx.

The disease has also spread upwards along the aryteno-epiglottidean folds of membrane, and has involved the pharyngeal mucous membrane for some distance on each side of, and below, the opening between the arytenoid cartilages, extending over the whole of the back of the larynx, and reaching the membranous wall of the pharynx on each side, and the beginning of the œsophagus below. It affected, in the first instance, the mucous membrane only; which in the recent state presented a pale ulcerated surface, slightly raised above the healthy mucous membrane, and well-defined from it, was not adherent to the subjacent muscular structure, but could readily be detached by dissection.

Processes of the diseased growth have made their way out of the larynx on the left side—one, through the posterior part of the crico-thyroid membrane, forming a small tumour, over which were stretched the fibres of the crico-thyroid muscle; another, below and behind this, involving the thyroid gland.

The microscopic characters were large epithelial scales, in specimens taken from any part of the ulcerated surface; large cells of various forms, with elastic fibres from the broken-down laryngeal structures, in sections from deeper parts of the growth.

The patient, from whom this was taken, was admitted into St. Mary's Hospital, under the care of Dr. Alderson, on the 24th of June, 1860. He was 48 years of age, had enjoyed good health till about four months previous to his admission, when he had what he called "a very bad sore-throat." He had a second attack three weeks before he came to the Hospital, which, however, had only become severe within a week, when he began to experience difficulty in breathing and in swallowing, and had severe cough with abundant bloody expectoration.

On admission, he presented all the signs of urgent dyspnoea, with laryngeal breathing, voice and cough. He was somewhat relieved by the application of leeches, but on the morning of the 26th extreme dyspnoea set in, and laryngotomy was performed by Mr. Frere the

resident medical officer. The immediate effect of the operation was to rescue the patient from an apparently moribund condition, and for a time he appeared to be doing very well. The cough, however, persisted. He had pain after swallowing, along the side of the neck to behind each ear, and symptoms of pneumonia came on. On the 24th of July, in a violent fit of coughing, after the removal of the tube, a large quantity of most fetid pus was discharged through the opening in the larynx; and from this time till his death his breath had a disgusting fetor, and he continued to discharge through the tube purulent matter in considerable quantity. He died from exhaustion on the 5th of August—nearly six weeks after the operation.

Both lungs (except a part of the upper lobe of each) were in a state of grey hepatisation; and behind the right was a localised empyema of considerable extent. The pus in it was exceedingly fetid, but it could not be made out that it had found its way into a bronchus.

There was no malignant affection of any other organ than the larynx.

In the second case, the left side of the larynx above the vocal cords is occupied by a tumour, originating apparently in the submucous tissue about the ventricle of the larynx, extending inwards into the cavity of the larynx, backwards into the pharynx (where it forms a tumour of considerable size), and upwards along the course of the aryteno-epiglottidean fold of membrane to the epiglottis, which it pushes up. Seen from the pharynx, the disease thus presents the form of a double tumour—one occupying the left half of the back of the larynx—the other, the corresponding half of the upper opening of the larynx, extending across the median line so as to leave only a narrow, irregular passage between it and the right side of the larynx, for the transmission of air.

The mucous membrane is not primarily involved; in the pharynx it is partly overlapped by the growth, chiefly pushed aside and thrown into numerous folds. The mucous membrane of the aryteno-epiglottidean fold lies on the laryngeal aspect of the growth, which has replaced its cellular tissue. That of the larynx is stretched over the part of the tumour springing directly from the interior of the ala of the thyroid.

The vocal cord of the left side is but slightly damaged, that of the right side is intact. The cartilages do not seem to be destroyed, though the left arytenoid is buried in the tumour.

Externally, the growth is limited by the ala of the thyroid and by the thyroid membrane, which last is tightly stretched over the upper part of the tumour.

Cancerous masses were found in both lungs, but in no other organ.

The tumour on section was soft, pale, irregularly vascular. Under the microscope, besides white and yellow fibrous tissue, derived from the structures about the larynx, were seen cells, making up the mass of the tumour, of various size and shape, but chiefly spherical or oval, with an average diameter of about $\frac{1}{1500}$ in. They had large nucleolated nuclei. The structure of the tumours found in the lungs was exactly similar.

This was taken from a man aged 55, in whom laryngeal symptoms had existed for four years, alteration of voice, impeded respiration, and difficulty of swallowing.

At times exacerbations occurred, and were occasionally so severe as to threaten suffocation, relief usually following a free discharge of purulent matter from the throat. For some time before his admission into St. Mary's Hospital, the difficulty of swallowing had increased, and he had become exceedingly weak and greatly emaciated from want of food. He seemed to improve for a short time, but dyspnoea suddenly set in, and before the operation of tracheotomy could be performed, he was dead.

Dr. W. H. BROADBENT, 4th of December, 1860.

4. *Epithelial cancer of the tongue. Cancer in the lungs.*

Mary W., æt. 55, was admitted under my care on the 3rd of August, 1860, for cancer of the tongue, and secondary enlargement of the glands in the neck. The tongue was much swollen and livid, very hard and very little moveable. On looking into the mouth no ulceration could be seen, but on turning up the edge of the tongue, an excavated ulcer was found in the left side. In the upper part of the left side of the neck, was a mass of enlarged glands, in some parts hard, and in others softening. One had been punctured, and had discharged a bloody fluid. The disease of the glands had then existed five months, and it was difficult to ascertain how long the affection of the tongue had preceded the enlargement of the glands. She had observed the enlargement almost as soon as she found her tongue painful. She was much emaciated, and looked very ill. Opiates were given to relieve the pain, which was very severe. The glands soon afterwards ulcerated, and at length the ulcerative process passed deeply into the upper part of the neck, and opened into her mouth. She could take liquid food only, and by far the greater part of this ran out of the mouth through the ulcerated opening. She became very thin, and sank rapidly from pain and exhaustion. Death took place on the 10th of October, about seven

months from the date she gave as the commencement of the disease. At the *autopsy*, the side of the tongue, the palate, and the structure of the neck generally, were found to be involved in a large cancerous ulcer. Portions of diseased tissue, cut from the tongue, showed the usual elements of epithelial cancer, there being abundance of epithelial and blood cells. The adjacent glands of the neck were similarly diseased. On examining the contents of the thorax, one of the bronchial glands was found enlarged to the size of a small walnut. It yielded a white creamy juice on section, and in this juice the microscope showed exactly the same cell-forms as existed in the diseased part of the tongue. Scattered in the upper lobes of both lungs, were several small masses of white deposit, which infiltrated the lung tissue, and on section yielded a creamy juice. The largest of these was not bigger than a hazel-nut, and the smallest were about the size of small peas. In three of these which were examined by the microscope, abundant cell-structures, characteristic of epithelial cancer, were seen. In a fourth, and one of the largest, only disintegrated lung tissue, with cells like those common in inflammatory effusions, was found. The cancerous

WOODCUT 3.



The figure shows the microscopic elements of all the cancerous masses.

a. Epithelial cells. *b.* Nested cells.

masses yielded abundance of the compound or nested cells, and also numerous flat epithelial scales. Some of the latter were of large size. There were also present numerous free nuclei. The appended Woodcut (Fig. 3) is from a drawing by Mr. Lens Aldous. All the other viscera of the body were carefully examined, but no other deposits were found except those above described.

MR. JONATHAN HUTCHINSON, 18th of December, 1860.

5. *Necrosed cartilage expectorated in a case of syphilitic laryngitis; use of the laryngoscope in diagnosing the condition of the glottis.*

The patient was a female, 40 years of age, who had been under the care of Mr. Ernest Hart for iritis, which proved to be syphilitic. She got better of this under quinine and iodide of potassium, but remained very much debilitated. Some time after, she was seized with symptoms of laryngitis, which were preceded by a progressively-increasing hoarseness of voice—the characteristic *vox rauca* of the disease. Dyspnoea and acute laryngeal pain came on suddenly, the voice became almost extinct, and, as local and general remedies failed, no other resource was left but tracheotomy. Before doing this, I examined the patient's throat, at Mr. Hart's request, with the laryngoscope, and found that the glottis was much constricted from thickening, being almost closed; the movements of the arytenoid cartilages were wholly impeded, and the superior vocal cords were irregular and jagged from ulceration. The throat was morbidly sensitive, and as the fauces generally were much inflamed, some dexterity was requisite in making the laryngoscopic examination expeditiously. The uvula was destroyed from ulceration, the soft palate was ulcerated in the centre and at its left side, and was adherent to the left posterior wall of the pharynx. The odour of the breath was that of an offensively-ulcerated throat, secreting pus.

From the severity of the general symptoms, and the condition of the throat, the necessity of immediately laying open the windpipe below the seat of disease was at once apparent, and I assisted Mr. Hart to perform tracheotomy at 2 o'clock the same day, the 18th of November, 1860. The relief was decided, although at one time, asphyxia was imminent; but from this she rallied, and expectorated two small pieces of detached and denuded cartilage, the larger of which is now exhibited. The patient survived ten days, and died from pneumonia. The aryteno-epiglottidean ligaments on the left side were found much thickened, with some ecchymosis; the glottis was eroded, as well as the superior vocal cords; the thyroid and cricoid cartilages were in a state of caries

and necrosis, and the arytenoid cartilages were wholly detached. There were marks of ulceration about the fauces and pharynx.

This case was brought forward to show the value of the laryngoscope in diagnosing a condition which determined the necessity of active measures of relief, although the patient's general condition was bad.

Dr. GIBB, 18th of December, 1860.

6. *Diseased lung, in connection with central limited empyema.*

A steady, temperate man, æt. 45, in good circumstances, and who had always enjoyed good health (but one member of whose family was said to have died of phthisis), had in July, 1859, a mild attack of scarlatina, by which he was somewhat debilitated, and soon after, complained of some cough, attended by slight febrile disturbance. For these symptoms he consulted his regular medical attendant, and on being questioned, stated that he had had slight expectoration of blood on at least one occasion. No sufficient explanation of these symptoms being discoverable, he was advised to see a physician, who also, after careful examination, failed to detect any evidence of pulmonary disease, although slight loose mucous crepitation could occasionally be heard over the larger bronchial tubes. About this time, also, he began to complain of the fetid odour of the secretion which he sometimes expectorated in small quantities. The breath, however, was not fetid. His general health at this time was scarcely at all interfered with; he had no dyspnœa or pain, nor any febrile disturbance. Soon after this, in a paroxysm of coughing, he suddenly brought up a large quantity of muco-purulent matter, mixed with much air and with some blood. This he continued to do from time to time; in the intervals, being free from cough, or any distress.

He was first seen by me in March, in conjunction with his other medical advisers, and without being apprised of their views, or of his previous history, I examined his chest with great care. He was in bed, looking rather pale and ill, but without the least distress or anxiety of countenance, and breathing calmly and freely. The tongue was moist, but coated and furred in the centre and back, his appetite good, his bowels regular, pulse a little quickened, skin sweating, and but little emaciated. In the intervals of the paroxysms of cough he rested well on his back in the recumbent posture. The amount of expectoration during the previous twenty-four hours had been about two pints. It was muco-purulent, and diffuent in character, of a yellowish-green colour, and in some parts tinged with blood. On proceeding to the physical examination of the chest, I found it ample, well formed, free from any local

depression or bulging, dilating freely and equally on inspiration, which neither gave him any pain, nor excited any cough. A very minute examination by auscultation and percussion revealed nothing abnormal, with the following trifling exception :—Just below the spine of the left scapula, there was slight but quite appreciable diminution of percussion resonance, and augmentation of voice resonance; over the same spot there might occasionally be heard loose mucous crepitation, apparently deep-seated. There was not, however, any pleuritic friction, nor any spot where respiration was absent. Everything about the apices seemed perfectly healthy. The result of my physical examination, I found, corresponded with that of those who had previously and repeatedly examined him. I gave it as my opinion that the case was one of central limited empyema, evacuating itself by the bronchi by a tolerably direct opening. I also ventured to give a favourable prognosis. He was kept on good nourishment, took a little liquor cinchonæ, with small doses of ipecacuanha wine, and used a stimulant friction to the chest. The expectoration gradually diminished, and he recovered so as to be able to go down to Devonshire, where he still further improved, and was able to go about and enjoy himself. He never, however, was entirely free from some expectoration, which was frequently of a reddish tinge, and at length he had an attack of profuse hæmorrhage from the lungs, by which he was prostrated for a time, but recovered so as to return to Town in good condition and looking well. In October the hæmorrhage returned, and he lost a large quantity of blood, but the cough retained the same character, occurring in paroxysms, and attended either by a certain amount of bloody, muco-purulent expectoration, or hæmorrhage. Styptics of various kinds appeared to restrain the hæmorrhage from time to time, and in the intervals of these attacks he was free from pain or dyspnœa, or any discomfort. The local physical signs, though confined to the same locality, now gave more evidence of consolidation of lung and of surrounding pleuritic inflammation. Towards the latter end of this month he sank from repeated larger losses of blood.

Post-mortem examination.—On opening the chest the general appearance of the lungs was healthy. The left lung, towards its root, became firmly adherent to the pleura costalis and spine over a space of several inches. In the immediate vicinity of the adhering parts there was a little lymph coating the surrounding pleura, but no amount of fluid in the general pleural cavity. On removing the lung, a portion, several inches in extent, was found consolidated, being densely infiltrated with greyish-granular matter, which, on subsequent examination by the microscope, showed morphological elements of the character of tubercle.

This condensed portion surrounded an irregular sinuous cavern about the size of a pigeon's egg, occupying the centre. The inner surface of this cavity had a rough, rather rugged appearance, and presented no trace of lining membrane. Several other smaller cavities communicated with each other and with the central cavern, by tortuous sinuses. The walls of these sinuses consisted of lung-substance condensed, and their inner surface had the same ulcerated appearance as that of the larger cavity. The surrounding tissue was healthy, and presented no trace of tubercular deposit. Several large bronchial tubes opened freely into these excavations. In the apex of each lung there were two or three small spots of condensed and contracted tissue, occupied by what had more the appearance of obalescent tubercle than anything else; but nowhere was there seen any crude or softening tubercles of the ordinary character.

It certainly admits of doubt as to what was the precise origin of the mischief, ultimately so serious in its effects, although so long obscure as to its seat and nature. The disease may have originated in the bronchial glands, or in the lung-substance at the root of the lungs, and subsequently implicated the pleura, or it may have commenced in the pleura as a local pleuritis, involving afterwards the lung, as the result of the discharge of the empyema by the bronchi. But the amount of matter suddenly evacuated, as well as the condition of parts before the lung was removed from the chest, appeared to leave no doubt that at one time there was a collection of pus in the pleural cavity, limited by surrounding adhesions, and confined to the root of the lung, thus accounting for the remarkable obscurity of the symptoms during life up to the time at which the discharge took place.

Dr. J. RISDON BENNETT, *15th of January, 1861.*

7. *Calcification of the cartilages of the larynx, including the arytenoid.*

The patient, from whom these were taken, was a man, *æt.* 41, who died of pneumonia, pericarditis, and Bright's disease of the kidneys. This man had the atheromatous expression during life, and the vessels at the base of the brain were found diseased, being lined with atheromatous patches in many places, several of them in a state of ulceration. Curiously enough, besides other evidences of disease, there was found a small clot in the right hemisphere of the brain, which was undergoing absorption. There was no history of any apoplectic symptoms during life.

All the laryngeal cartilages presented beautiful illustrations of complete calcification, this process extending as well to both of the arytenoid, which were wholly calcified.

This process is considered to be very rare by some pathologists in the arytenoid cartilages. Andral has never met with it. A single instance is given by Ryland in his work on the "Larynx and Trachea," and he refers to another published by Dr. Francis in the *Medico-Chirurgical Transactions*. I have examined the dry preparation of the larynx in the Guy's Hospital Museum, which shows this condition in the arytenoid cartilages, but not so complete as in my own specimens.

Although supposed to be so very rare, I believe that these small cartilages are not uncommonly affected. I have come across a considerable number of specimens in which calcification had occurred in them conjointly with the other cartilages of the larynx. Several of the London Museums contain specimens, but the richest collection is to be seen in that of the Charing Cross Hospital, chiefly collected by the exertions of Mr. Canton.

Dr. GIBB, *5th of March*, 1861.

8. *Disease of the cricoid cartilage in a child.*

J. W., æt. 8, was admitted into Guy's Hospital under the care of Mr. Cooper Forster, on the 30th of January, 1861.

Four years previously, he had suffered from a severe attack of scarlet fever, followed by some chronic affection of the eyes, and, in the course of a year or two, by enlargement of the cervical glands. The glands gradually increased in size, but otherwise the child's health appeared to be good. On the 20th of January he became hoarse; dyspnœa, loss of voice, difficulty in deglutition, and œdema of the face supervened. These symptoms increased in severity until his admission on the 30th. Some hours after admission he became suddenly very much worse; the dyspnœa was extreme, and deglutition was impossible. Tracheotomy was at once performed, and followed by immediate relief. In the course of a few hours, he was able to swallow, and in two days spoke so as to be heard. He went on very well, and improved rapidly in general appearance. During the first few days, the tracheotomy-tube was very frequently blocked up by muco-purulent matter. On the 11th of February, the tube was removed for a few moments; impending suffocation, however, necessitated its immediate re-introduction. On the 26th of February, the inner tube having been removed to be cleansed, the outer tube was pulled out by the child himself, in consequence of its having become plugged up. All efforts at respiration ceased in a few seconds, and the child was covered up as dead. About twenty minutes afterwards, the tube was re-introduced by Mr. Tuck, the house-surgeon, and artificial respiration was commenced and perseveringly continued.

In the course of half-an-hour the child came round, and breathed freely, as before, through the tube. He again went on very well until the night of the 4th of March, when he was found quite dead,—with the tube out.

On *post-mortem examination*, the organs (with the exception of the larynx and the parts connected therewith) were found to be healthy. The larynx was filled with pus and mucus, and its mucous membrane generally was somewhat swollen and congested, as also was that of the upper part of the trachea. Close to the anterior attachment of the vocal cords was the opening of an abscess, the cavity of which was occupied by the remains of the cricoid cartilage. This cartilage was very extensively diseased, the anterior part was completely destroyed, and the ulceration was extending backwards on the right side as far as the median line. The left side of the cartilage still retained its perichondrium. The other cartilages were healthy.

This case is interesting pathologically, on account of the rarity of disease of the laryngeal cartilages in children. The disease of the cartilage was probably secondary to the attack of scarlet-fever, and more or less directly gave rise to the persistent enlargement of the cervical glands. The case derives a practical interest, especially from the facts, 1. that immediate and great relief, and a fair prospect of ultimate recovery were afforded by tracheotomy; and, 2. that the child was restored by means of artificial respiration so long after it had been covered up as dead. Mr. DURHAM, 19th of March, 1861.

9. *Larynx of a man aged 103 years.*

The patient, from whom this specimen was removed, died from the effects of an accident, a fortnight after the injuries he then sustained, and whilst in the full enjoyment of health. After death, disease of the bladder was found, and, which had not been suspected, or complained of by the patient during life. This viscus was shown to the Pathological Society by Dr. Beith, R.N., and the account of it published in the "Transactions" (February 4th, 1851). In speaking of the constitutional condition of this old man, Dr. Beith observes:—"He had enjoyed, during his long life, an almost uninterrupted continuance of good health, and his faculties were unimpaired to the last. His sight was good, hearing acute, and memory tenacious. He walked long distances and with comfort, until the time of his accident. He might, indeed, be looked upon as a hale, hearty, old man." Dr. Beith stated, that "he thought it might be interesting to the Society to learn, in

connection with this lengthened term of life and continuous state of health, the body presented, after death, an universally normal set of organs, with the single exception he then placed before the Fellows ; and, that the indication which we ordinarily look on as so significant of advanced years—the arcus senilis—was wanting.”

Dr. R. Quain examined the heart and found it healthy.

The larynx shows calcification to have proceeded only to a small extent, compared to the degree to which this change often occurs in those who have attained scarcely more than half the number of years of the present subject, and Mr. Canton presented a large number of specimens, indiscriminately taken, in demonstration of this statement.

In the subjoined drawings (Woodcuts 4 and 5) of the preparation

WOODCUT 4.



WOODCUT 5.



from the old man, the black parts show those portions of the laryngeal cartilages, respectively, which have become completely calcified ; whilst the remainder of them is still cartilaginous, though these latter parts, are, more or less, in a state of fatty degeneration, and brownish discoloured.

The calcified parts, when submitted to microscopical examination, are found to have undergone true ossification, the lacunæ with their canaliculi are fully formed, and the Haversian canals large and branching, as shown in the annexed drawing (Woodcut 6).

The order in which the cartilages become bone, is, the thyroid, cricoid, and arytenoid. It is by no means unusual to find these latter

so affected, though Andral has stated they "never ossify." The cornicular appendages, even, may become impregnated with calcareous salts, as shown in some of the specimens now exhibited.

WOODCUT 6.



To the subject of these so-called senile changes in the cartilages of the larynx peculiar interest attaches; not so especially, when considered *per se*, but, more particularly, when regarded in association with other alterations, *pari passu* progressing, in other and quite dissimilar organs of the body, *e.g.*, the cornea, the heart, and arteries, &c.; and in "premature age," these parts become equally impressed with that stamp of degeneration, which is so commonly to be found as a characteristic of the more advanced period of life. On the other hand, great length of years may be arrived at, and yet the body not have become, structurally, old; whilst the constitutional vigour will, at the same time, be in direct ratio to the degree of persisting integrity of the tissues. One man may pass through a long succession of years, and still be accounted young in proportion as structure and stamina are unencroached upon by those ravages, which are, more usually, the common lot; whilst another may early succumb to these inroads; and, in becoming affected by the conditions wrought by degenerative processes, the health fails, and premature old age is engrafted. It must not be forgotten, however, that those are occasionally met with, who have died, even supra-centenarians, though their lives have been embittered by adversity and disease, and, in whom, after death, great changes

shall be found of the above-mentioned kind, and to the extent which has, in so many other instances, materially shortened life. Here, an originally implanted vigour of constitution has enabled it to withstand the effect of those morbid agencies, which, in the less strongly endowed organism earlier attacked and more speedily proved fatal.

Mr. E. CANTON, 19th of March, 1861.

10. *Fibrinous cast of the rima glottidis.*

The specimen is a perfect cast of the rima glottidis. It was coughed up by a strumous young woman; she had been suffering with gradually increasing hoarseness for three days, when dyspnoea became very urgent. There was then only slight redness of the fauces, and a small œdematous spot on one tonsil, but no perceptible swelling. Six leeches were applied over the larynx, and a saline mixture with antimony administered. Twelve hours afterwards the fibrinous cast was expelled by coughing. The skin over the larynx was then blistered. Some bloody sputa were coughed up on a few occasions during the next two days, and much pain was complained of, referred to the larynx or epiglottis. Recovery was complete in a week. No local applications were used to the fauces.

Mr. BALLARD, 19th of March, 1861.

11. *Cancerous tumour involving the larynx, and dislocating the epiglottis and hyoid bone. Death from sudden spasm.*

P. C., æt. 30. Twelve months before his death he first complained of sore-throat, for which he received much treatment by caustic applications, &c. Six months ago, a portion of the right tonsil was excised with relief; subsequently it greatly increased in size, and enlarged glands in the neck were seen. Soon there was dysphagia; and an ulcerated opening in the throat appeared. Next, the skin over the glands gave way, and an ulcer, which soon had a malignant aspect, began in that spot. He then suffered from dyspnoea, and was sent to the Nottingham Hospital, to be under the care of Dr. Robertson, with the expectation that tracheotomy would be necessary. On his way there, he was suddenly attacked by dyspnoea, and died. He became the subject of a Coroner's inquest, and a *post-mortem* examination; when death was found to have occurred from obstruction of the rima glottidis, by the tumour which overhung it.

Mr. HENRY THOMPSON, for Dr. ROBERTSON, 2nd of April, 1861.

Report on the above specimen.—The preparation consists of a tumour the size of an orange, the greater part of which is situated above the thyroid cartilage; a portion extends to the right of it, overlapping its right wing. The right half of the tumour is coursed by a sulcus running from above downwards. Anteriorly, the position of the hyoid bone is seen to be considerably altered; its body is pushed obliquely towards the left side of the thyroid cartilage, its right horn being much displaced upwards, and apparently lost in the substance of the tumour; whilst its left horn rests upon the superior border of the left wing of the thyroid cartilage, its extremity touching the anterior part of the base of the superior cornu of the latter. The greater part, if not the whole, of the tongue, has been removed; some of its muscular attachments are noticed, however, on the hyoid bone. The thyro-hyoid membrane is stretched upwards. Posteriorly, the tumour seems to rise right up from the concavity of the upper part of the entire thyroid cartilage, but encroaching on the right side; its most prominent part projects backwards one inch beyond the level surface of the cricoid cartilage. The right superior cornu of the thyroid cartilage is lost in the tumour; by means of an oblique groove, however, the outer edge of the cornu can be traced upwards. The course of the tumour is now observed to run from the base of the right superior horn of the thyroid cartilage, obliquely across to the left side, invading the right thyro-epiglottidean fold of mucous membrane, displacing the epiglottis to the extreme left, beyond the line of the superior cornu of the thyroid cartilage; and so compressing it laterally, as to leave a pear-shaped opening about two lines broad at its mouth, and three lines and a-half long, and almost wholly obliterating the passage at the depth of three lines, where a mere slit could be noticed. A portion of the right epiglottidean fold is still seen attached to the tumour, and a small part of the mucous membrane of the pharynx is seen on the left side of the inner part of the left wing of the thyroid cartilage.

On laying open the larynx, the extent of compression upon the epiglottis and superior aperture is well seen, for the surfaces of the opposed mucous membrane here seem to be almost in complete contact, and studded with little irregular prominences, as if the disease had invaded the sub-mucous areolar structures. The left ventricle of the larynx is about a line higher than the right, and from compression from before backwards, its cavity is broader than is the right. The right is shallower than natural, and almost obliterated. The epiglottidean folds of mucous membrane are flattened out, especially on the right side; the

projection of the left greater cornu of the hyoid bone, downwards and backwards, prevents it to some extent on the left side.

The right side of the larynx would thus seem to be firmly attached to the tumour, which does not appear to have involved, or sprung from the tongue. The amount of compression which it has exerted upon the upper part of the larynx is quite remarkable, and it is astonishing that the patient was enabled to breathe at all through such a small aperture as that which has been described.

To the eye, the tumour has the appearance of medullary cancer, with an abundance of thick milky juice. This is confirmed by the microscope, which shows numbers of nest-cells and granules.

Dr. GIBB,

Dr. DICKINSON, 2nd of April, 1861.

12. Dilatation of the bronchial tubes.

The present specimen is brought forward to contrast with two other forms of dilatation of the bronchial tubes, alluded to in a former communication, that, for instance, occurring in connection with cirrhosis of the lung, and that commonly found in children as a result of whooping-cough, in connection with simple collapse of the pulmonary tissue. There is, however, another variety in which the bronchial tubes in any part of the lung may be so dilated as to become closely contiguous, and the pulmonary tissue between them be entirely atrophied. In the present instance, the patient, a woman æt. 39, was admitted under our care with the history and symptoms of bronchitis, associated with dropsy, &c. In the left infra-clavicular region the cavernous sounds indicated a large cavity. The *post-mortem* examination showed general bronchitis and emphysema of the lungs. The upper part of the left lung appeared contracted and puckered on the surface, and when cut through was found to be wholly made up of dilated bronchial tubes. There was a congeries of these tubes with scarcely a trace of pulmonary tissue amongst them.

Dr. WILKS, 16th of April, 1861.

III.—DISEASES, ETC., OF THE ORGANS OF CIRCULATION.

1. *Retroversion of one of the aortic valves, and destruction of some of the chordæ tendineæ of the mitral valve.*

G. S., æt. 43, fireman of a steam-boat, was admitted into St. Thomas's Hospital under the care of Dr. Peacock on the 14th of June, 1860. He ascribed his illness to cold taken four months before, and stated that though he had served for ten years in the army, he had not had rheumatism or any serious illness or accident before his present attack, and that his family were healthy.

He complained of shortness of breath, a dry cough, pain across the lower part of the chest, and restlessness at night. His appetite was pretty good, but his tongue was thickly coated, and his breath had an hepatic odour; he suffered from thirst, felt sickly, and had occasional vomiting; the bowels were torpid. Pulse 98 to 100, somewhat jarring; the urine was scanty and high coloured, specific gravity of 1012, and contained one-sixth of albumen. The abdomen and lower extremities were much swollen.

The cardiac dulness commenced at the level of the fourth cartilage and extended from the right side of the sternum to near the line of the nipple. The resonance on percussion was impaired in other parts of the chest. Respiration was attended with sub-crepitation and bronchitic rhonchi, especially on the left side. A systolic murmur was audible in all parts of the chest, but it was decidedly most distinct and harsh at the apex, and thence towards the left axilla. At the level of the third cartilage it was very indistinct, and it was inaudible at the upper part of the sternum. It was feebly heard at the lower angle of the left scapula. There was also a distinct musical murmur heard at the base of the heart, with the diastole, but this was inaudible at the apex, along the course of the ascending aorta, and to the left of the spine, posteriorly.

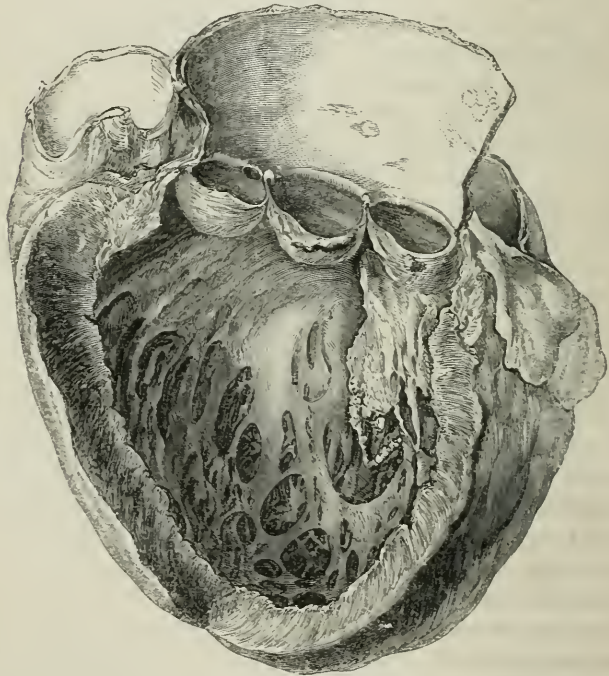
He was directed to take pills containing blue pill and colocynth, with digitalis, hyoseyamus, and compound ipecacuan powder; the compound scoparium mixture and two glasses of gin in the day.

On the 28th, his gums were slightly affected by the mercury. The pulse was somewhat bounding, but compressible. His breathing was freer, but he complained of suffering more from the cough; he still had no expectoration. The abdomen and lower extremities were less swollen than before. To take the pills every other night and to have half-a-drachm of compound tincture of camphor in each dose of the mixture.

On the evening of the 1st of July he passed a considerable quantity of blood by stool, and the following day vomited much blood. He complained of pain at the epigastrium; the bowels were relaxed; the urine contained one-third of albumen, but was increased in quantity. The pills were discontinued, and replaced by the hyoscyamus and Dover's powder at night. On the same day he was taken with epistaxis, and subsequently spat blood. The urine became suppressed, and his intelligence impaired, and he died on the 5th.

The body was very anasarous. The pericardium healthy, the heart hypertrophied and dilated and weighed twenty-one ounces avoirdupois. The free edge of the posterior semilunar valve was retroverted, and hung loosely into the cavity of the left ventricle (Woodcut 7), so as to have allowed regurgitation from the aorta. The under surface of the retro-

WOODCUT 7.



verted portion had a few fibrinous fringes adhering to it. The free fold of the mitral valve was perfectly loose, owing to the destruction of several

of the chordæ tendineæ, and must have allowed of free regurgitation from the ventricle into the left auricle. The fragments of the destroyed chordæ tendineæ were covered by vegetations, as was also the under surface of the valve itself, and some of these vegetations were infiltrated with earthy deposit. A granular patch of old lymph was adherent to the endocardium at the posterior surface of the left auricle, immediately above the valve. The left auricle was dilated, and the left ventricle hypertrophied and dilated. The valves of the right side were healthy, but the right ventricle was hypertrophied. The aorta was healthy. The pleuræ were free from adhesions, but each cavity contained about half-a-pint of serum. The lungs were large, œdematous, and crepitant everywhere, except at the lower part, where they were airless from collapse. The bronchial tubes contained much frothy fluid. The liver was large, congested, and somewhat cirrhotic; the spleen was large, pulpy, and contained a partially decolorized fibrinous mass of considerable size; the kidneys were much hypertrophied, weighing together nineteen ounces; they were minutely congested and studded with red, bloody points. On microscopic examination the tubes contained more or less decomposed blood, but there was no other appearance of disease. The stomach, intestines, pancreas, and supra-renal capsules were all healthy.

The great interest of the case Dr. Peacock considered to be: 1. The existence of disease both in the aortic and mitral valves, which had been manifested by distinct physical signs, so that a correct diagnosis had been effected during life.

2. The musical character of the murmur heard at the base with the diastole of the heart, and which was clearly traceable to the loose retroverted edge of the posterior semilunar valve.

Dr. PEACOCK, 16th of October, 1860.

2. *Aneurism of the internal carotid artery in the cavernous sinus.*

Mr. Holmes exhibited a preparation, showing the left internal carotid artery, affected by aneurism at the anterior part of the cavernous sinus. The tumour was about the size of a small nut, its outer part filled with firm, laminated coagulium, the centre free, and (at the time of *post-mortem* examination) filled with fluid blood, which exuded at both openings between the artery and the tumour, when pressure was made on the latter. The dilatation seemed to involve the whole circumference of the vessel, which was perfectly healthy in the rest of its course. The

third nerve was tightly stretched over the tumour, and so much pressed upon by the latter, near the sphenoidal fissure, as to be almost divided. The fourth nerve had run round the outer side of the tumour, but was not shown in the preparation, having been so much thinned by pressure as to have given way in removing the parts. The first division of the fifth nerve lay in close proximity to the lower part of the tumour.

The patient, a boy æt. 16, was originally admitted into St. George's Hospital on August 21st, 1860, on account of disease of the heart, unconnected with any history of rheumatism.

He had then clear indications of mitral disease and hypertrophy of the heart; besides which, he complained of pain over the left eye and general headach, which had come on four days before his admission. No further note of any symptoms connected with the eye or head appeared till the 24th, when he complained of giddiness, but this was attributed to the use of digitalis, and the medicine therefore omitted. Next day, the symptoms were increased, with a tendency to ptosis, and the movements of the eye were rather uncertain. This condition gradually became worse, and in little more than a fortnight the ptosis had become complete. The pupil of the affected eye was widely dilated and fixed. The eyeball was motionless, and the sight so far gone, that though he could count fingers, he could not see to read the printed heading of the diet-card. The left side of the forehead felt numb, the loss of sensation corresponding with the distribution of the supra-orbital branch of the fifth nerve. There was a considerable degree of lachrymation on the affected side. He had now no pain in the head, nor giddiness. In this condition he remained for some time, and was then made out-patient.

When re-admitted, on November 7th, there was a very slight amount of ptosis, and the sight of the eye had returned, but its movements were uncertain, and he saw double. He was suffering from dyspnoea, with hæmoptysis, and died next day.

On *post-mortem* examination, a copious deposit of bead-like lymph was found lining the internal surface of the left auricle, and masses of similar lymph appeared also on the edges of the mitral valve. A large fibrinous block was found in the spleen, and smaller blocks in the kidneys. The lungs presented several patches of extravasated blood.

In this case, the symptoms of palsy of certain nerves at the base of the brain, following on those of fibrinous deposit on the valves of the heart, led at first to the suspicion that the case was one of embolism

in an artery inside the skull, and consequent softening of the portion of brain supplied by the affected vessel. Nor does it appear impossible that the nerves may have been originally compressed by an aneurism rapidly forming behind such a plug. The influence of plugs of fibrin washed down into the arteries in inducing aneurismal dilatation has already been noticed by Professor Jolliffe Tufnell.* The difficulty in the case before us is to explain how, if the aneurism originated from such a cause, the tube could have recovered its patency. It must, however, be allowed that some disturbance in the plugging coagulum may have rendered such an event possible; while, on the other hand, the absence of all trace of disease in the wall of the artery, and the presence of blocks of fibrine in the viscera, gives some probability to the conjecture, that the dilatation was due to a clot obstructing the artery as it makes its last bend upwards.

Mr. T. HOLMES, 20th of November, 1860.

3. *Three cases of tubercular pericarditis.*

The following three cases were brought under the notice of the Pathological Society, simply as illustrations of the fact of the occasional occurrence of tubercular pericarditis. Though tubercle of the serous membranes is by no means an usual form of disease, tubercle of this particular membrane is unquestionably rare; and, indeed, the cases here adduced are the only examples of it that have fallen under my own personal observation. The cases are somewhat imperfectly recorded; yet, so far as the histories extend, they are certainly authentic. The most striking feature in them is, perhaps, the fact that the pericardial disease was in each instance overlooked. The explanation of this certainly cannot lie in the existence of any specific difficulty in the way of recognising pericarditis when associated with deposit of tubercles; but is doubtless to be sought in the presence of certain peculiarities in each case, which either masked the pericardial mischief, or directed the attention of the physician almost exclusively to the condition of other organs. The peculiarities of which I speak need not be here specified, as they will become sufficiently manifest on perusing the cases.

* "Dublin Quarterly Journal of Medical Science," May, 1853.

CASE 1.—*Phthisis. Tubercular ulceration of ileum, with perforation. Tubercular pericarditis.*

J. E., a man-servant, æt. 21, was admitted for phthisis, June 13th, 1854, presented all the usual indications of the disease, and died of it, July 10th, 1854.

Autopsy.—Of usual stature, much emaciated.

Chest.—The surface of the heart was enveloped in a rough layer of false membrane. This varied from a line in thickness downwards. It was recent, but, at the same time, tough, and adherent to the surface of the pericardium; and at many points incorporated with a similar layer, attached to the parietal surface. This membrane was studded pretty thickly with opaque, yellowish spots, varying from a mere point to the size of a pin's-head; in addition to which were several patches of irregular shape (some as much as three-quarters of an inch long by a quarter of an inch wide), which were formed apparently by the coalescence of smaller deposits. The heart presented no unhealthy appearance. The pleuræ were firmly adherent. The lungs contained many large cavities, and were thickly studded with tubercular masses. The mucous membrane of the larynx and trachea was a good deal excoriated.

Abdomen.—Peritonitis, with effusion of lymph and turbid serum, was discovered on opening the abdominal cavity. This was due, not to deposit of tubercle on the peritoneal surface, but to several minute perforations in the ileum, allowing of a slight escape of the intestinal contents. Numerous large and deep tubercular ulcers were found in the ileum, and it was in the floor of some of these that the perforations just spoken of had taken place. Liver, spleen, kidneys, and other abdominal organs healthy.

CASE 2.—*Tubercular pericarditis.*

W. McC., a schoolboy, 13 years of age, was admitted into St. Thomas's Hospital on the 3rd of February, 1857. He was an unhealthy-looking boy, with a puffy face, presenting purplish patches, with thick lips, and enlarged cervical glands. He stated that he had been ill for two months only. He was suffering from dyspnoea and cough, but expectorated little. There was a considerable quantity of fluid in the abdomen; the legs were œdematous; the urine albuminous. On examining the chest, the right side was found to be completely dull below the margin of the fifth rib, but elsewhere the resonance was fair. The respiration was generally rather loud, but healthy. At the dull part,

however, a faint wheezing only could be heard. The left side was fairly resonant, and the respiration puerile. The intercostal spaces projected, on the lower part of the right side, which was evidently larger than the left. The action of the heart was irregular. Active purgatives, followed by iodide of potassium internally, and the external application of iodine, were useful in reducing the œdema.

After a time, the dulness of the right side decreased, and the breath sounds became more audible, being accompanied and almost drowned by loud creaking and rubbing noises. Tonics were given, and at first with good effect.

He began, in the commencement of April, to suffer from very great dyspnœa, and palpitation, but no murmur was detected. He died on the 18th.

Autopsy.—Of ordinary stature, somewhat emaciated; lower extremities œdematous.

Chest.—Both lungs were universally and firmly adherent to the parietes of the chest by old adhesions, those at the base being peculiarly dense and thick. The apices of both lungs were puckered, and contained a little indurated tissue; in the left was a small earthy concretion. The lungs generally were somewhat congested, and very sparsely crepitant, and the lower lobe of the right one was almost completely carnified, and its tubes filled with puriform fluid. The bronchial tubes were generally healthy, containing only a moderate quantity of viscid mucus.

The anterior mediastinum was occupied by much dense fibroid tissue, within which were numerous and large patches of yellow tubercular deposit. The pericardium was firmly adherent throughout. The adhesions were thick, tough and fibroid, and contained a considerable amount of tubercular matter, in the form both of yellow tuberculous masses of various sizes, and of laminæ of considerable extent. The walls of the left ventricle were thin, the cavity somewhat dilated, and the valves healthy. The walls of the right ventricle were considerably thicker than natural; and the cavity of this, as well as those of the auricles, were enlarged. The tricuspid and pulmonic valves were healthy. In the right auricle was a softening clot, the size of a marble, filled with thick, brick-red fluid.

Abdomen.—Peritoneum healthy. Liver large, in a nutmeg condition. Spleen rather tough, dark-coloured, and pulpy, with a fibrinous block in its upper part. The kidneys appeared healthy in texture, but were united below, by a cross-bar, extending from one organ to the other in front of the spine. All the other abdominal organs were healthy.

Head.—Brain, &c., healthy.

CASE 3.—*General tuberculosis. Symptoms during life chiefly due to tubercle in the brain. Tubercular pericarditis.*

E. L. H., a young woman, æt. 20, was admitted into St. Thomas's Hospital on the 16th of June, 1860, emaciated, and suffering chiefly from febrile symptoms, and restless drowsiness. The bowels were regular, and there was no cough, or marked thoracic mischief. The tongue was dry and brown. She was peevish, and answered questions unwillingly. The symptoms continued much the same; she was extremely feeble; her tongue became drier and browner, her pulse rapid and weak; the drowsiness increased, though it never amounted to actual coma, and her answers to questions became mere mutterings; the bowels remained obstinate, and her water had to be removed periodically by the catheter. She died on the 30th.

Autopsy.—Body extremely emaciated.

Head.—The surface of the brain was somewhat dry; and the pia-mater generally congested. There was some inflammatory exudation around the optic commissure, and parts seated within the circle of Willis. A little yellow tubercular matter occupied the inner extremity of each fissure of Sylvius, and a little was detected on the upper surface of the cerebellum. A few miliary tubercles were scattered over the surface of both crura cerebri. The substance of the brain was generally a little congested and soft. The lateral ventricles contained a considerable quantity of serum. Seven or eight globular masses of cheesy tubercle, each about as large as a hazel-nut, were found scattered in the substance of the cerebrum, generally a little beneath the surface, and in every instance in connection with the convolutions.

Chest.—The pericardium was unadherent, but contained a little fluid. The surface of the heart was studded rather thickly with yellowish-grey tubercles, from the size of a tare downwards; and a few were found on the surface of the parietal pericardium. The subserous tissue, especially at the back of the base of the heart, was deeply congested. The heart itself was of the usual size, and quite healthy. The pleuræ were firmly adherent, the adhesions on the left side being thickly studded with greyish and somewhat clustered miliary tubercles. The lungs presented a large amount of tubercular deposit, chiefly in small masses, of the yellow variety, and tending to break down. There were no cavities, however, larger than a horsebean, and few larger than a pea.

Abdomen.—The abdominal viscera were united to one another and to the parietes by firm adhesions, which were studded with masses of

tubercle. The masses were comparatively few, but large, and chiefly connected with the intestines. Liver healthy. Spleen containing numerous small globular masses of tubercle. The intestines and other abdominal organs were for the most part healthy.

Dr. BRISTOWE, 4th of December, 1860.

4. *Dissecting aneurism of aorta.*

An old woman, æt 75, died in Guy's Hospital, November, 1860, under Dr. Gull's care. She only survived three days, during which time she had a considerable degree of febrile excitement, as shown by a quick pulse, hot skin, pains in the limbs, and brown furred tongue. On physical examination, the only disease to be detected was a large pulsating tumour in the abdomen; or a tumour which heaved under the hand rather than one having a distinct pulsation. No bruit was audible in it. The blood was found to be freely circulating in the limbs below. The *post-mortem* examination showed various senile changes in the body; and in the abdomen was a large tumour, situated in front of the lumbar vertebræ, and reaching to the anterior abdominal walls. Closely adherent to its upper part was the duodenum, and below this the mesentery; on removing these, blood oozed out, showing that the walls of the sac had thus been opened. On laying open the aorta throughout its course, this sac was likewise opened from end to end, and it was then found to be an aneurism formed in the walls of the vessel. The inner surface of the latter was excessively diseased, being covered with bony plates, and full of fissures. Just above the bifurcation, a vertical fissure an inch long existed in the inner and middle coats, and it was through this that the blood had escaped to the exterior. The whole length of the aneurism was about five inches, and the separation of the coats, now filled with blood, about two inches. Owing to the softening, and adhesion of viscera to the tumour, it could not be very accurately made out in which of the coats the separation had occurred; but at the top and bottom of the sac it was pretty clearly ascertained that the external coat formed its boundaries. Towards the middle of the tumour, a softening of the coats and coagulation of blood had occurred, so that the whole was involved in a semifluid mass resembling pus. The blood nearest to the internal coat of the vessel had formed into regular fibrinous layers.

Dr. WILKS, 4th of December, 1860.

5. *Two specimens showing deviation of the popliteal artery from its ordinary course.*

Both specimens were taken from one man. The subject had undergone dissection at St. Thomas's Hospital.

In each specimen, the deviation of the artery from its ordinary course was caused by an abnormal attachment of the inner head of the gastrocnemius muscle to the popliteal space of the femur.

In the specimen from the left limb, the gastrocnemius was attached by its inner head to a spot in the popliteal space, midway between the median line of the space and the line leading from the *linea aspera* to the inner condyle of the femur. In consequence of this irregularity in the origin of the gastrocnemius, the popliteal artery took a course, from the point at which it appeared coming through the adductor magnus, downwards, behind the tendon of the muscle, to a space channelled between the abnormally attached inner head of the gastrocnemius and the inner condyle of the femur; thus being diverted from the ordinary course between the two heads of the muscle, to a new position internal to the inner head, and behind the internal condyle of the femur. From this position the vessel was directed outwards, under cover of the gastrocnemius, across the popliteus muscle to the usual place for bifurcation into anterior and posterior tibial arteries.

In the right limb, the inner head of the gastrocnemius was not only abnormally attached to the popliteal space of the femur, as in the left, but was divided into two portions, an inner tendinous and an outer fleshy portion; and the artery, having descended behind the tendon of the adductor magnus muscle, as in the left limb, passed between the tendinous and fleshy portions of the gastrocnemius. In other respects its course was not dissimilar from that of the left artery.

In each limb, the artery was accompanied by a small vein, which ran upwards to join the femoral; whilst the trunk, which resulted from the junction of the tibial veins, passed upwards between the two heads of the gastrocnemius muscle to join the profunda in the middle third of the back of the thigh.

These specimens were exhibited to illustrate an extremely rare occurrence, deviation of the popliteal artery from its usual course.

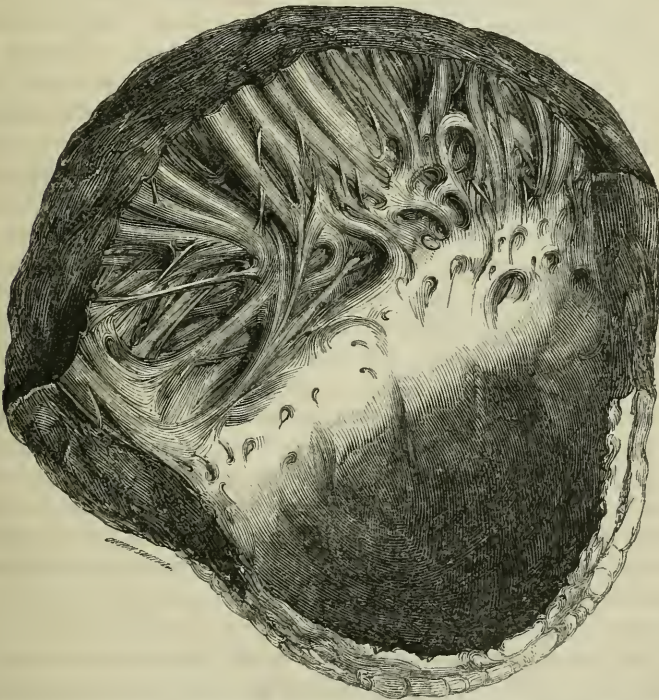
MR. JOHN CROFT, 18th of December, 1860.

6. *Aneurism of the apex of the left ventricle of the heart.*

The gentleman, from whom this specimen was removed, *æt.* 49, died suddenly in the night. He was a large, well-built, muscular man, and, till the period of his death, had always enjoyed good health. No heart-symptoms had ever been complained of, and he was not known to have ever suffered from rheumatism.

Lying over the pericardium were large, rounded masses of fat, which entirely concealed this membrane from view. The pericardium itself was intimately adherent to the heart in every part of its extent; and, to some degree, to the great vessels at the base of the organ. The left ventricle was greatly hypertrophied, except at and above the apex, where the walls were exceedingly attenuated at the expense of the inner portion of them. The parietes of this dilated part—which was sufficiently large to contain a plover's-egg—were composed, without,

WOODCUT 8.



The figure represents the portion of the heart in which the aneurism is situate.

of adherent pericardium and degenerated muscular tissue ; and, within, of endocardium, thickened and opaque. To the latter were firmly attached some flakes of old and laminated fibrin. The dilated part was otherwise smooth ; being entirely destitute of fleshy columns ; and the endocardium, immediately above the wide and direct opening of communication between the aneurism and the ventricle, was thickened and quite opaque (Woodcut 8).

Microscopic examination showed the tissue of the heart to be generally healthy, but in the neighbourhood of the aneurism, the muscular substance was greatly altered by fatty degeneration, and the walls of the sac itself were composed chiefly of fibrous tissue.

Mr. CANTON, 1st of January, 1861.

7. *Enlargement of the pulmonary artery in contraction of the mitral orifice.*

The specimen exhibited illustrated the changes which occur in the heart and arteries in cases of constriction of the mitral valve. The alterations in the form of the organ itself are well known, but these are not made to include the vessels which are given off from it. Thus, the great enlargement of the left auricle is described, as well as the necessary hypertrophy of the right side of the heart, whilst the left ventricle, from receiving a small supply of blood, is known to preserve its original dimensions, or to become actually atrophied. With this diminution of the left ventricle there is often a corresponding smallness of the aorta, and with the hypertrophy of the right ventricle an increase in size of the pulmonary artery. Probably these changes are not well-marked, except in young subjects, where the heart is growing, although the tendency exists at every age. This increase in the calibre, as well as the thickness of the walls of the pulmonary artery, is connected in all probability with a peculiarity of the cardiac sounds, as heard during life, and pointed out by Skoda and others ; viz., an increased intensity of the second sound, owing to the more forcible closure of the pulmonary sigmoids. It is stated (and probably with truth) that the diastolic sound is increased in intensity ; and the explanation is to be found in the impeded circulation through the lungs from the mitral obstruction. Connected with this intensified sound is the actual hypertrophy of the pulmonary artery, as found after death.

A boy, æt. 16, had had rheumatism several years before his death ; and when seen shortly before this event, he had a loud systolic bruit, dropsy, and all the symptoms of cardiac disease. The character of the

second sound was not observed. The inspection showed the heart much enlarged, the right side gorged with blood, the right ventricle much hypertrophied, the left auricle immensely enlarged, and walls correspondingly thickened. The left ventricle was of natural size and its walls thin. The mitral orifice was so contracted that it would not admit more than the passage of one finger. The pulmonary artery and aorta appeared to have changed places, as regarded their relative strength and size, the pulmonary being the larger and stronger vessel. This was particularly manifest before the vessels were opened. When this was done, the diameter of the pulmonary orifice was much greater than that of the aorta, whilst at the same time the walls of the former were very considerably thicker—as much as half as thick again. The lungs were in an extreme condition of the induration which is so commonly seen in cardiac disease, both organs being firm, hard, and fleshy; whilst, in places, a few red spots, denoting small extravasations of blood, were seen. Liver nutmeg. Spleen and kidneys very firm; stomach highly congested.

Dr. WILKS, 15th of January, 1861.

8. *Aneurism of the aorta. Rupture into the pericardium. Subsequent closure by inflammation.*

A man, æt. 62, was admitted into Guy's Hospital, under Dr. Wilks's care, on December 6th, 1860, suffering from all the usual symptoms of heart-disease. There was considerable dyspnœa, slight yellowness of the skin, and dropsy of the legs. On listening to the chest, a very slight and scarcely perceptible systolic bruit was heard over the neighbourhood of the valves and limited to that spot; thus the nature of the cardiac lesion was not at first quite apparent. On the next visit, two days afterwards, the man was found to have acute pericarditis, denoted by a loud to-and-fro rub over the base of the heart. He had no pains in the joints, and indeed had never had any rheumatic affection. The pericardial signs continued for some days, when they disappeared, giving place to the very indistinct systolic murmur at first heard. In the mean time the original symptoms had increased, there was complete orthopnœa, and the dropsy had progressed. He thus continued growing gradually worse, until his death, on January 6th, 1861.

The body, both externally and internally, presented the appearances usually seen in those who die of valvular disease of the heart, as dropsy, nutmeg liver, &c. The pericardium, on being incised, was found to be closely adherent to the heart, but it was easily stripped off, showing

that the inflammation was recent; in fact, about three weeks old. At the base of the heart, a small space was seen between the serous membranes, and in this was contained some grumous blood mixed with lymph. Here also the ascending aorta was seen bulging outwards in the form of a small aneurism, and in the centre of the aneurism was a rent holding a coagulum. It was thus clear that this rupture had been the cause of the pericarditis which took place two days after the man's admission, and that the lymph then thrown out had prevented a further effusion of blood and a fatal hæmorrhage. The aneurism itself was about the size of a small egg, was situated in the ascending aorta, and projected forwards so as to cause pressure on the pulmonary artery. On opening the latter, its calibre was found diminished to about one-half, by this round projection on its interior. Here, then, was the cause of the original symptoms, and one which shows that obstruction at the pulmonary artery produces (as it evidently must) the same effect as any impediment at the aortic or the mitral orifice, although the latter are the two spots where disease is mostly looked for. Dr. WILKS, 15th of January, 1861.

9. *Rupture of the left ventricle of the heart.*

In this specimen the rupture is seen on the anterior surface of the left ventricle of the heart. It is rather more than one inch in length, and it is parallel with the septum of the ventricles, from which it is distant about half-an-inch. The edges of the rupture are irregular, and the perforation is complete throughout the whole length of the lesion. The walls of the heart are thin and covered with fatty growth, whilst the muscular fibres are more or less in a state of complete fatty degeneration throughout. The heart's texture is consequently soft and fragile. The coronary arteries are atheromatous. The external pericardium was covered with fat, and on laying it open, the cavity was found to contain about twelve ounces of soft blood-clot, but no serum. The body from which the specimen was removed was fat; the lungs were healthy, and no other organs were examined.

The subject of this fatal lesion was a gentleman, æt. 73, who some eight years before his death had a slight paralytic seizure, and another about six years subsequently. By this last attack the left side of the body was partially disabled. In other respects his health was good. It has been ascertained since his death that his breathing was very short on ascending a stairs or a hill. His pulse was described as being regular. He had had much anxiety during the latter years of his life. On the Thursday preceding his death he was seen by Mr. Hemming of

Notting Hill, who found him labouring under symptoms "which resembled gastrodynia, with which he had been attacked the previous evening. He complained of nausea, loss of appetite—his tongue was furred, and his bowels were confined. He also complained of a distressing pain in the chest, shooting towards the back, which came on about two o'clock, during the preceding night, and prevented his lying down." The dyspeptic symptoms were relieved by Mr. Hemming's treatment, but the pain in the chest returned each night about the same hour. It became less severe during the day. I was requested to see him on the following Monday, but was unable to do so until Tuesday. I then found that for the first time since the Wednesday night he had had no pain, and had slept well during the preceding night. He continued in this improved condition until Friday. He took his breakfast on this day as usual, had some mental excitement, had the chest pain for half-an-hour, and then drove some six or seven miles in his carriage. He called on some friends, began to narrate the causes of his excitement, rose suddenly from his chair, made an exclamation indicative of pain in the chest, and died instantly.

There are two features in this case which I would wish to indicate—one, the previous existence of paralysis. I have more than once recognised the association of the lesions, showing the general tendency of the degenerative process affecting alike the vessels of the brain and the texture of the heart.

The second point is the progress of the rupture. I think there are grounds for believing that the rupture commenced with the first access of pain, and was progressive. Death took place the moment it became complete.

Dr. QUAIN, 19th of February, 1861.

10. *Aneurism of the inferior mesenteric artery, with small sacs in the ascending aorta, illustrating the mode of formation of aneurisms.*

J. T., æt. 30, an excavator, admitted into St. Thomas's Hospital, under Dr. Peacock's care, May 23rd, 1860. He had been ailing for some time, and had been an out-patient for three weeks before his admission. He then laboured under difficulty of breathing, cough and expectoration, and palpitation of the heart. The præcordial dulness was increased in extent, and a systolic murmur was audible over the whole space but most intensely below the nipple; a slight diastolic murmur was also heard on the right side of the upper part of the sternum. These symptoms became rapidly aggravated while he was in the Hospital. He had great dyspnœa and troublesome cough, and expectoration

of bloody sputum. There was a general deficiency of the resonance on percussion with bronchitic sounds in all parts of the chest, and entire dulness and subcrepitation and pleural friction in the dorsal regions. Latterly, his lower extremities were œdematous. He had pain and tenderness on pressure in the loins, with sickness and vomiting; and the urine was of low specific gravity and albuminous. He died on the 14th of June, or three weeks after his admission into the Hospital, and six from the period at which he had first come under treatment.

On examination, the pericardium presented no appearance of disease. The heart, and especially the left ventricle, was greatly enlarged and hypertrophied, and weighed twenty-one ounces avoird. There was no valvular disease on the right side, and the aortic valves were also healthy; but the mitral valve, though not diseased, had doubtless admitted of regurgitation from the great enlargement of the cavity of the left ventricle.

Apoplectic deposits existed in the lungs with inflammatory exudation, and a layer of lymph covered the pleural surface of each lung.

The kidneys were firm and congested.

An aneurism about the size of a pullet's-egg occupied the origin of the inferior mesenteric artery. It arose from the commencement of the artery and extended about about an inch along its canal. The cavity contained coagula, which, on the outer side, were laminated and decolorized, in the centre, were massive and still bloody. A second aneurismal sac, about the size of a chesnut but somewhat shallow, arose from the ascending portion of the aorta, an inch and a-quarter from the origin of that vessel (Plate II.). The cavity of this sac was filled by decolorized coagulum containing softened fibrine in its centre. A small sac, not larger than a pea or bean, with a clot at its origin, was also found at the commencement of the arteria innominata. By careful maceration and manipulation, the lining membrane of the aorta had been separated from the middle coat in the ascending portion of the vessel and its large branches, so as to show that the membrane was continuous throughout the cavities of the small aneurisms. The middle tunic was also found to be greatly thinned and in places absent from the fundus of each aneurism; the coats were unusually vascular, thin, and firmly attached together; and the pericardium was strongly adherent on the outer side of the middle-sized sac.

Dr. Peacock regarded the specimens exhibited, as illustrating the mode in which aneurismal sacs form in the larger arteries, as the sequence of acute inflammatory action. At a former meeting of the Society (see "Transactions," Vol. II., 1848 to 1850, p. 201) he had exhibited three

DESCRIPTION OF PLATE II.

Illustrating Dr. Peacock's communication on the Mode of Formation of Aneurisms, p. 74.

- Fig. 1. Represents a portion of the ascending aorta, with a sac in the middle coat.
- Fig. 2. The dilated internal coat, carefully dissected off the former.
- Fig. 3. A clot which was removed from the cavity of this aneurism.
- Fig. 4. Shows the pericardium adherent to the external surface of the aneurism.
- Fig. 5. Is a diagram of the parts concerned in the aneurism, as they would be seen by making a section ; it is intended to illustrate their condition and relations.

Fig. 2.

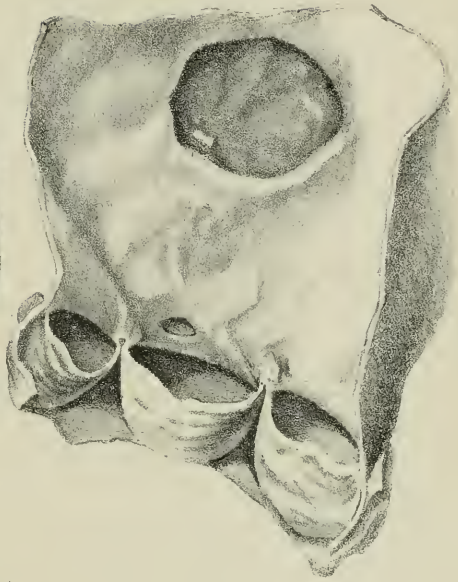


Fig. 1.

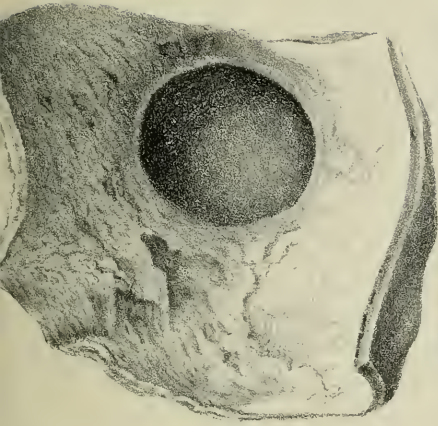


Fig. 3.

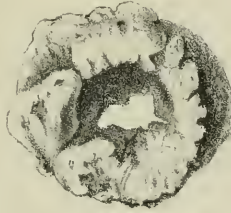
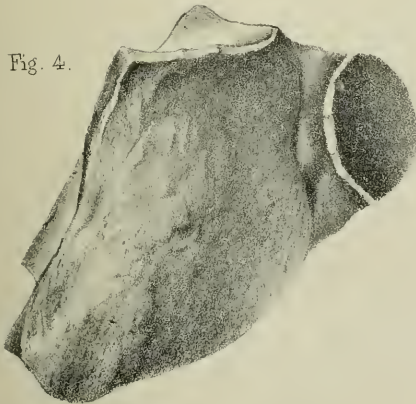
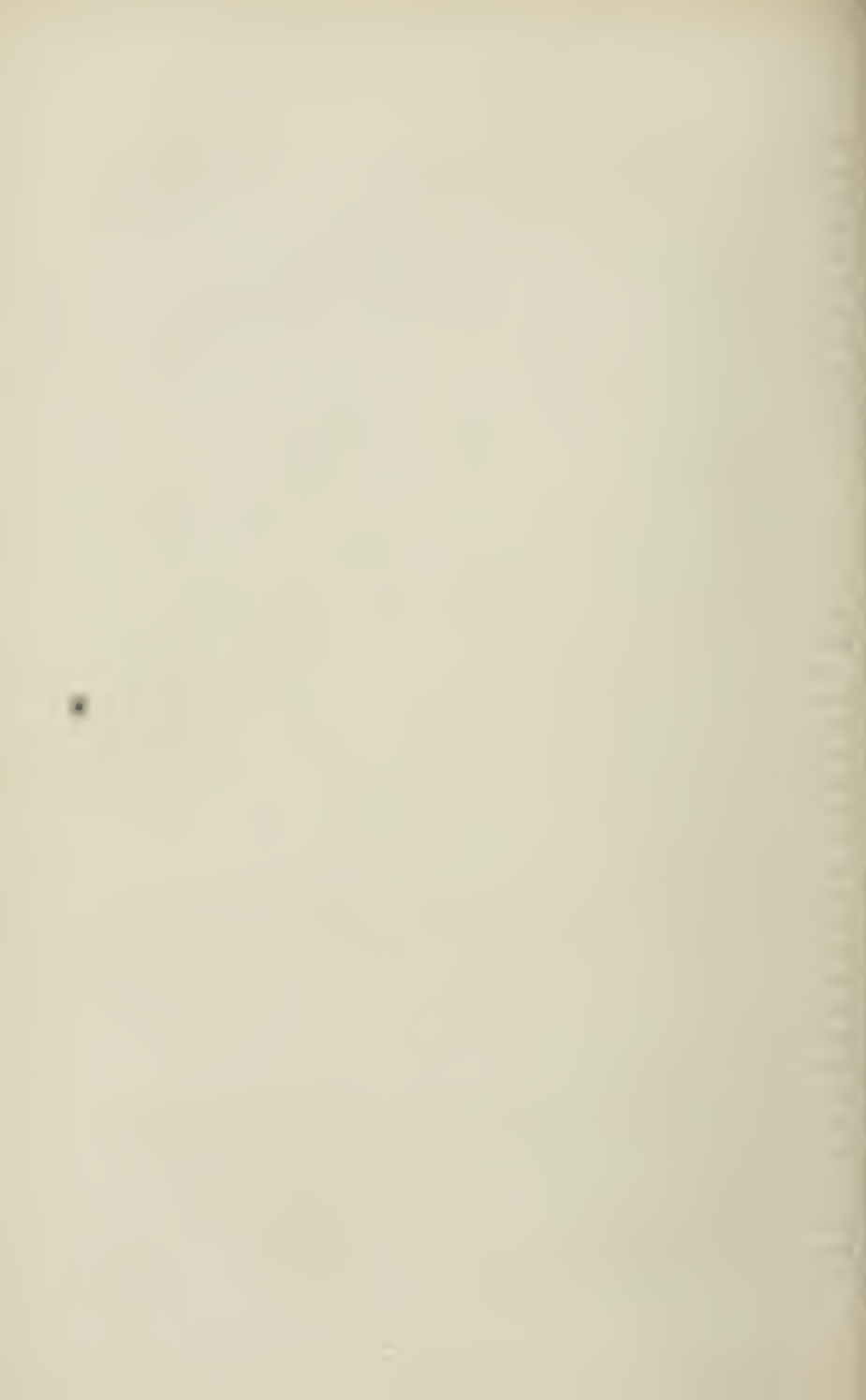


Fig. 5.



Fig. 4.





series of preparations, in which small sacculated aneurisms were found to have originated in the atrophy or destruction of the middle coat of the aorta from atheromatous deposit, and the consequent protrusion of the internal coat in contact with the external—constituting examples of the *aneurisma herniosum* of Dubois, Dupuytren, and Liston. In those instances, however, the change was chronic; but in the specimens now exhibited, while the defect was also apparently situated in the middle tunic and the internal coat become protruded from want of support on its outer side, Dr. Peacock believed the disease to have been acute, and to have originated in inflammatory action in the middle and external coats.

DR. PEACOCK, *2nd of April*, 1861.

11. *Obstructive disease of the aortic and mitral valves. Small aneurism at the base of the left ventricle.*

J. S., æt 27, a Japanner, was admitted into St. Thomas's Hospital in September, 1860. He had for some time laboured under dyspnœa, cough and expectoration, with dropsy, and died suddenly with symptoms of acute affection of the larynx.

On examination, in addition to the laryngeal disease, the heart was found greatly increased in size, having weighed seventeen ounces avoird. (average weight nine ounces eleven drachms*). There was marked dilatation of the right auricle and ventricle and of the left auricle, with hypertrophy and dilatation of the left ventricle. The left auriculo-ventricular aperture was greatly contracted, so that it admitted only of the passage of a ball measuring twenty-four French lines in circumference (the natural size being forty-four French lines),† and the valves were very greatly thickened and indurated. The aortic orifice was also considerably contracted, measuring twenty-four French lines in circumference (the natural size being thirty-five French lines), and the semilunar segments were very much thickened, blended together and indurated. Below the united attachment of the left and posterior valves, there was a small crescentic opening, with thickened and indurated edges, leading into a canal which opened into a small aneurismal sac. The sac was situated on the outside of the commencement of the aorta, and by its pressure produced slight bulging inwards of the aortic walls on the one side, and of the auricle on the other. It would have lodged a nut or small filbert.

* Dr. Peacock "On the Weight and Dimensions of the Heart in Health and Disease;" "Edinburgh Monthly Journal of Medical Science," Vol. XIX., 1854 (3rd Series, Vol. X.); and "Pathological Transactions," Vol. VI., 1854-5, p. 119.

† *Ibid.*

The disease of the aortic and mitral valves Dr. Peacock regarded as having commenced in intra-uterine or very early life, and he stated, that in similar cases of very considerable and old aortic valvular obstruction, it was by no means uncommon that more or less protrusion of the walls of the ventricle existed at the base of the aortic valves. In some instances, decided aneurisms, as in this case, are found in that situation, and in others there is a canal leading from the ventricle into the aorta, passing external to the diseased valves. In the latter class of cases it might be open to doubt whether the disease originated in an aneurism of the origin of the aorta burrowing towards the ventricle, or in a perforation commencing in the ventricle and opening into the aorta; but he believed the latter was, in by far the largest proportion of cases, the true mode of origin.

Cases of aneurism, similar to the present, had been described by Dr. Thurnum,* and a specimen was exhibited by Dr. Peacock to the Society in 1851,† and is also described in a paper on *Malformation of the Aortic Valves as a cause of Disease*, published in the *Monthly Journal of Medical Science* for 1853. A similar case was exhibited to the Society by Dr. Bristowe in 1853.‡

Dr. PEACOCK, 2nd of April, 1861.

12. *Communication between the ventricles of the heart. Tubercular peritonitis and ulceration of bowels.*

E. H., æt. 14 months, an extremely small child, was brought to the Hospital for Sick Children, in Great Ormond Street, in February, 1861. His head was very small, and the fontanelles quite closed. He appeared to be less intelligent than a child of his age should be. The legs were constantly drawn up on the abdomen and rigidly maintained in this position.

There was a tendency to lividity of the feet, which were always cold.

Over the third and second left costal cartilages a *loud soft systolic* murmur was heard; it was inaudible over the second right cartilage.

The child had a good appetite, and frequently suffered from diarrhœa.

He died on the 21st of February, and an inspection was made eight hours after death.

The height of the child is 24 inches. His head measures fourteen inches and a-half in circumference, just above the ears. The adductor muscles of the thighs are rigid and shortened, so that the lower ex-

* "Med. Chir. Trans.," Vol. XXI., 1858.

† "Trans.," Vol. III., p. 287.

‡ "Trans.," Vol. IV., p. 109.

tremities are drawn up on the abdomen. The outer hamstring muscles are also shortened, but to a less extent.

The intestines and their peritoneum are firmly adherent to the abdominal walls; the intestines are firmly matted together, injected, ulcerated, and at one point perforation has taken place. The ulceration has partially involved the abdominal parietes, forming little cavities which are surrounded by thickened tissue.

Lungs free from tubercle, partially collapsed.

Heart.—The ductus arteriosus is not pervious, will admit a probe for a short distance from the pulmonary artery, but not into the aorta. Foramen ovale nearly closed, only admitting a small probe to pass. Valves healthy.

Below the attached margin of one of the semilunar valves of the aorta is a depression in the wall of the left ventricle, the floor of which is composed of a white tendinous material. In the bottom of this space is a small hole, admitting only a moderate-sized pin's-head from the left to the right ventricle. The aperture in the right ventricle is somewhat larger than that in the left, and is also surrounded by a tendinous ring, which is much wider on its left than on its right margin. The situation of the opening in the right ventricle is near the attachment of the chordæ tendineæ of one flap of the tricuspid valve, and about one-quarter of an inch from the attached margin of one flap of the semilunar valve of the pulmonary artery. The tricuspid orifice measures two inches in diameter, the pulmonary one inch and three-eighths, the mitral one inch and four-eighths, and the aortic one inch and two-eighths.

On examining the intestines more closely, numerous tubercular ulcers are found in them, in Peyer's patches and elsewhere; the peritoneum is covered with a hard, shotty deposit. Mesenteric glands slightly tubercularized, averaging a horsebean in size. The encephalon weighs fourteen ounces, and appears healthy.

Liver healthy, weighing five ounces ten drachms. The left kidney weighs one ounce six drachms, and the right, the same.

Remarks.—This case is remarkable from the very loud murmur which was heard, with an opening between the ventricles, so small as scarcely to have allowed of any interference with the ordinary current of the circulation. The anæmic condition of the child probably intensified the sound somewhat, but could scarcely alone have produced so loud a murmur in this situation.

Dr. THOMAS HILLIER, *2nd of April, 1861.*

13. *Enlargement of the pulmonary artery and its branches, in connection with bronchial disease.*

Not only in the case of enlargement of the right side of the heart, in connection with contraction of the mitral valve, is the pulmonary artery enlarged, but also in bronchial affections; in the latter case, however, when the bronchi are dilated, the branches of the pulmonary artery undergo a like distention. Two specimens which were exhibited illustrated this condition, the one being the lung of a boy who had long suffered from dilatation of the bronchial tubes consequent on hooping-cough; the other, the lung of a man affected with the disease known as cirrhosis. In each case the bronchial tubes were considerably dilated, and accompanying them were branches of the pulmonary artery in the same condition. Whatever cause prevails for the distention of the tube, the same obtains for the blood-vessel; in the case of cirrhosis, this appears to be due to the inflammatory process in the pulmonary tissue, and its subsequent contraction; while in the case of the child, the distention is connected with simple collapse of the tissue, and subsequent atrophy. In the former, we have always considered Corrigan's theory to be efficient, whilst, in the latter, where no inflammatory products exist in the tissue, the mode of formation is more difficult to understand,—the first change here being in the tube itself; but, as subsequently, the collapse of the tissue would favour the expansion of the tube, so the same forces would be in operation to dilate the blood-vessels.

Dr. WILKS, 16th of April, 1861.

14. *Adherent pericardium, &c.*

The principal interest of this specimen was clinical rather than pathological. It was the heart of a lad, æt. 15, who was admitted into the Victoria Park Hospital under the care of Dr. Bennett, with well-marked physical signs of acute pericarditis persisting for a considerable time, whilst the patient was carefully watched from day to day. Friction-sound was extensively heard, both in the upright and recumbent position, the heart's sounds being throughout distinct and natural, though somewhat feeble, palpitation and irregularity of action varying a good deal. Towards the close of his illness, the lad had a slight attack of pleurisy of the left side, towards the base and to the left of the præcordia. Unaccountable diarrhœa supervened (no mercury and very little aperient medicine having been exhibited), and from this he sunk and died. There was no history of any previous rheumatic attack. On examina-

DESCRIPTION OF PLATE III.

Illustrating Mr. Henry Lee's cases of Extensive Deposit of Fibrin in the Cavities of the Heart, p. 79.

- Fig. 1. Represents the right side of the heart, partially filled with firm, white, and adherent fibrin; this had become indented opposite the tricuspid and semi-lunar valves, and branched into the divisions of the pulmonary artery.
- Fig. 2. The left side of the heart, opened from behind, showing firm, decolorized fibrinous masses, extending from the auricle through the mitral valve to the ventricle, and thence through the semi-lunar valves into the aorta, plugging the coronary arteries as well.

Fig. 2.

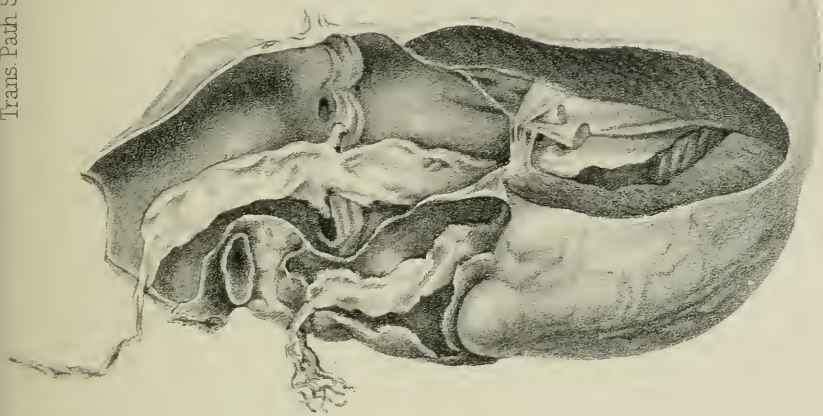
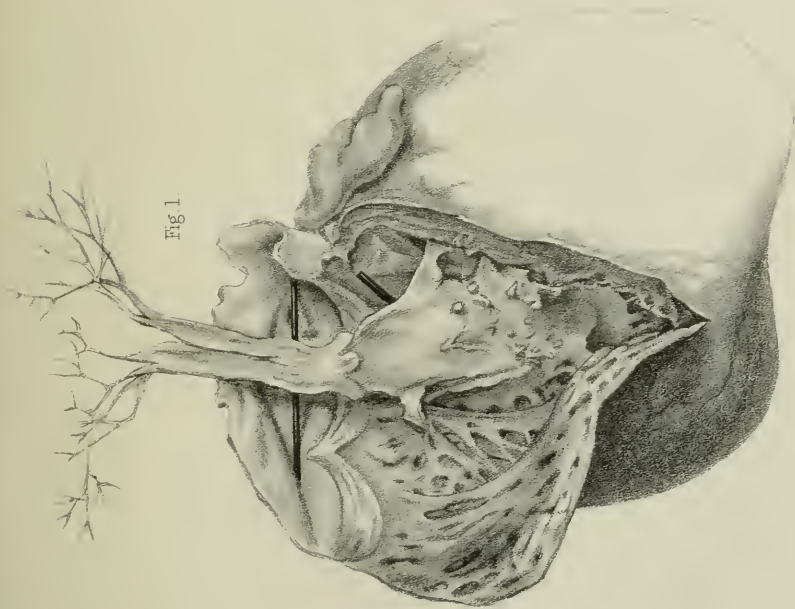


Fig. 1.





tion after death, extensive ulceration of the bowels was found to have existed. This was probably of tubercular origin, although the lungs were free from tubercle. Slight fibrinous exudation on the surface of the lower pleura of the left side existed, and recent adhesions, readily broken down, connected the lower lobe of the lung to the exterior of the pericardium. With the exception of a small space, about a square inch in extent, towards the posterior part of the left ventricle, the pericardium was completely and firmly adherent to the heart by what appeared to be old, thoroughly organized adhesions. These adhesions were so close that it was difficult to understand how any friction-sound could have been produced where they existed, and so firm as to render it extremely improbable that they had resulted solely from recent acute inflammation. If the friction-sound was to be referred to the surrounding pleuritis, then the case affords a remarkable illustration of how completely pleuritis, in the vicinity of the heart, may simulate acute pericarditis when the pericardium is already extensively adherent.

DR. RISDON BENNETT, *16th of April, 1861.*

15. *Three specimens of extensive deposit of fibrin in the cavities of the heart.*

The first—a recent case—is illustrated by two drawings of the right and left side of the heart respectively (Plate III.). All the cavities of the heart in this instance contained firm, adherent masses of decolorized fibrin. On the right side the fibrin extended into the pulmonary artery (taking an accurate mould of the semilunar valves) and was prolonged into its ramifications, terminating in the smaller subdivisions.

On the left side the fibrin, deposited to a less extent, was prolonged in a similar manner into the aorta, taking a mould of the semilunar valves, and plugging the orifices of the coronary arteries.

The preparation, from which the drawings were taken, was from a patient under Mr. Lee's own care in the Lock Hospital. She had suffered from a sloughing bubo, followed by erratic erysipelas. The lumbar glands were found, after death, in a state of suppuration, and there was some effusion of turbid fluid in the peritoneal cavity. From the condition of the lumbar glands, Mr. Lee thought it was highly probable that in this case the blood was contaminated through the lymphatic system; and the severity of the disease, as usually happens in the more direct contamination of the blood through the veins, fell upon the right side of the heart.

It was remarkable in this instance that the patient died without any

of that extreme difficulty of breathing, which usually characterizes obstruction to the pulmonary artery. The cause of this difficulty of breathing in such cases, Mr. Lee supposed to be, that more blood is deteriorated in the general circulation through the body, than can be purified in the diminished circulation through the lungs. The balance between the amount of blood deteriorated, and the amount of blood purified, is thus destroyed, and hence that gasping for breath and that extreme distress usually experienced.

But in this case there was no such difficulty or distress, and this was attributed to the fact, that the circulation through both sides of the heart was obstructed, and that although less blood passed through the right ventricle, yet that the balance was maintained. The patient, then, as it was believed, died, not from want of proper oxygenation of the blood, but from want of a due supply of blood to different organs, and especially to the heart itself.

The short, but fully-formed plugs, which obstructed the coronary arteries, were shown in the preparation and in the drawing.

Two other preparations, in which branched fibrinous deposits had formed in the right side of the heart, and the pulmonary artery, were also shown. The three preparations demonstrated the same disease arising from different causes.

In the case already referred to, there was reason to believe that the blood was contaminated through the lymphatic system.

In the second case, the disease had its origin apparently in a small abscess which formed after re-section of the elbow-joint. In one of the veins leading from the neighbourhood of the joint in this case, was a slender, but very firm, fibrinous clot; and the tricuspid valve was firmly plastered down by adherent fibrin. This preparation had been put up several years, but it was only a few weeks previously that the pulmonary artery had been opened, in order to see whether any fibrin was deposited in its interior; and the preparation now showed, that not only did the pulmonary artery contain a decolorized clot, but that this had branched into the ramifications of both pulmonary arteries. This patient died two weeks after the operation, and symptoms of extreme difficulty of breathing had made their appearance three days before death.

In the third case, there had been no suppuration or external lesion in any part, and the only disease discovered on a *post-mortem* examination, which could account for death (independently of the fibrinous deposits), was an enlarged and diseased condition of the supra-renal capsules. These were, on both sides, converted into a light brown, and easily

lacerable material, resembling gingerbread. A portion of this substance was examined at the time the *post-mortem* was made, and pronounced to present the characters of fatty degeneration.

A very firm band of fibrin was adherent in this case to the right ventricle of the heart, and, passing through the pulmonary artery, branched, as in the other cases, to some of its smaller subdivisions.

In this instance, the nature of the affection was diagnosed during life. The difficulty of breathing at different times was intense, and from the symptoms, which extended altogether over a period of some two or three years, there was reason to believe that the coagulum had, at one time, become separated, and that it had subsequently gradually formed again. In the three preparations there were then illustrations of the same effect produced by different causes. Firm adherent masses of fibrin were, in each case, deposited in the heart; and, being carried, or growing, in the direction of the current of the blood, obstructed the great arteries of the heart. In the first case, the blood was apparently contaminated through the lymphatic system; in the second, more directly through the veins; and, in the third, during its circulation through tissues, affected with an extreme degree of fatty degeneration. Mr. Lee added, that he had produced the same branched fibrinous coagula by the direct introduction of pus, from an acute abscess, into the blood of a living animal.

MR. HENRY LEE, 21st of May, 1861.

16. *A case of spontaneous coagulation of the blood in the arteries of the limbs.*

The following case affords an example of coagulation of the blood, during life, in several of the larger arteries. There was no primary obstruction to account for it, nor were the vessels themselves in anything but the most natural condition. A mass of fibrin was indeed found, with the clot, in those vessels themselves which had been earliest affected; but there was nothing of the sort in the others, where the obstruction, though of later date, had been equally complete. It was therefore necessary to infer that independent coagulation of the blood had been the first step, the separation of the fibrin a subsequent one.

A man, æt. 36, had been treated in St. George's Hospital, in June 1860, for what was supposed to be chronic peritonitis. He again became a patient, in the following February, with much hardness and tenderness about the right side of the belly, which he had had for six

weeks. The place was leeches and fomented. He took a draught, containing nitre, and three grains of blue pill three times a-day. This treatment was persisted in for seventeen days, latterly in diminished doses. At the end of that time no evidence of peritonitis remained, and he took restorative medicines. About a week later, he began to suffer with vomiting and diarrhoea, which resisted all remedies for ten days, and left him in a very prostrate condition. He was then seized, in the evening, with pain in the great toe on the left side so severe as to make him cry. This gradually extended up the limb, lasted for a few hours, and left it cold and cadaverous. Within two days all the extremities went through the same course, the arms being last affected. He then lay free from pain and almost pulseless. The limbs were cold and white, with the exception of a few purplish blotches; one, especially dark, involved the left little toe. These were not of deep colour, nor well-defined in outline. The man's features were sharp and his countenance haggard. Stimulants were freely administered, he took a grain of opium every three hours, and the limbs were wrapped in cotton-wool. They, however, became colder, and more like those of a corpse, the nails assumed a bluish tinge, he became very restless, and at last quietly sank.

The body was much emaciated. The skin was generally of its natural hue, excepting that patches upon the soles of the feet and upon the toes, and also the nails on the hands and feet, were of a purple tinge.

The heart was large, pale in colour, and greasy to the touch. Under the microscope, the fibres were found impregnated with oil. A large decolorized clot occupied the right ventricle, while there was some loose black coagulum in the left.

The folds of the peritoneum were generally adherent to each other, and to the intestines, throughout the abdominal cavity.

Most of the large veins were examined, they generally contained a little fluid blood and all seemed perfectly healthy. With the exception of a trifling patch of atheroma upon the arch, the whole of the aorta was found healthy, with its lining white and quite smooth. Both iliac arteries were in the same state, on both sides. The left femoral, when cut down upon, was full and cord-like. When the cavity was laid open, a mass of granular yellowish fibrin was found occupying the vessel (Woodcut 9), and loosely adherent to its walls, from about an inch above the origin of the profunda, exactly to that point. A few filaments only entered the profunda, so that that vessel still remained pervious and empty. The main trunk of the femoral was filled up with unattached black coagulum, from the fibrinous mass described to the origin of the anastomotic, where it abruptly ceased. The arteries below this point were examined as far

as the ankle, and found to be empty and perfectly natural. Unattached black clot filled the *right* femoral from below the origin of the profunda,

WOODCUT 9.



The figure represents the left femoral artery, the profunda, and the anastomotic, laid open—the fibrinous mass in the former, and the firm coagulum in the latter. Two-thirds the size of nature.

and reached downwards as far as the middle of the posterior tibial. In the midst of this clot, in the popliteal vessel, there existed a mass of fibrin similar to that found on the other side, but smaller. All the branches of the arch were examined and found natural. The arteries

of the left arm appeared full and round, and when cut open were found filled with loose black coagulum, from the commencement of the brachial to the middle of the ulnar artery. The lining membrane to that extent was of a purplish tinge, as if blood-stained, but was not unnatural in any other respect. Towards the end of the brachial artery, on the right side, a small quantity of similar coagulum was found. With the exceptions mentioned, the arteries throughout both upper extremities were natural.

Dr. DICKINSON, 21st of May, 1861.

IV.—DISEASES, ETC., OF THE ORGANS OF DIGESTION.

1. PHARYNX, ŒSOPHAGUS, STOMACH, AND INTESTINES.

1. *Stomach of a girl nine years old perforated by an ulcer.*

A girl, æt. 9, was attacked suddenly on October 5th, 1860, at eight P.M., with violent pain in the belly. Fomentations were applied by her mother, and she passed the night apparently relieved and free from distress. The following morning, at half-past five, she became collapsed, retched once or twice, and died at six o'clock, before medical assistance could be procured. Her death was the subject of an inquest.

On *post-mortem examination*, I found the belly distended with gas, the peritoneum—especially where it invested the small intestines—intensely inflamed, and a quantity of brownish fluid in its cavity. In the lesser curvature of the stomach, midway between the pyloric and œsophageal openings, was a perforation. The ulcer which had pierced the wall was of the usual funnel-shape, with edges somewhat thickened. The mucous membrane of the stomach generally was free from any marks of disease, and there were no cicatrices of old ulcers.

The other organs were healthy, and the body presented a well-nourished appearance. At the inquest, evidence was given that she had always enjoyed good health, the only exception to it being an occasional uneasiness, scarcely amounting to pain, felt at the pit of the stomach.

The only especial point of interest in the case is the age of the patient.

THOMAS BUZZARD, M.B., 6th of November, 1860.

2. *Fistulous orifice in the abdominal parietes opening into a circumscribed cavity, which communicated with the interior of the colon and duodenum, and indirectly with the gall-bladder.*

History.—B. L., æt. 38, was admitted into the Middlesex Hospital, under Dr. Goodfellow, September 25th, 1860, and died November 14th. Married twice; eight children, and six miscarriages.

About a year before death, without any apparent cause, she was suddenly seized with sickness, vomiting, and great prostration; which symptoms were followed by general fever, and tenderness over the abdomen. The bowels were regular. After a few weeks she recovered, and remained in her ordinary health up to September 14th, 1860.

On September 13th, she fancied she strained the abdominal muscles, by carrying some heavy pails of water upstairs. On the following morning she woke with slight pain in the abdomen, which was greatly increased after breakfast, and was then accompanied by sickness and vomiting of a green bitter fluid. She said the pain was just as if her abdomen had been tied round with a rope. The sickness abated after three days, when the bowels had been freely opened by medicine, but the pain continued, and the patient became very weak. On her admission into Hospital, on the 25th, there was great tenderness of the abdomen, which was most intense at the umbilicus. Immediately to the left of umbilicus, was a superficial circular swelling, with a firm, dense rim, and doughy in the centre. Motions of bowels normal. Pulse 144; great prostration.

The next day (26th) a little yellow pus, of a stercoraceous odour, but exhibiting nothing except pus-cells under the microscope, could be squeezed through the umbilicus. After this date, the opening continued to discharge large quantities of fetid pus. From September 30th to October 17th, the pus was mixed with faecal matter. On November 9th, the opening ceased to discharge even pus.

About three weeks before death, abscesses began to form in various parts of the body, over the right parotid, in the soft parts of the right hip, &c., and the patient suffered from great dyspnoea, and expectorated purulent sputa. It was impossible to examine the chest, as the slightest movement or manipulation caused great pain. The prostration gradually increased, and death took place on November 14th.

Autopsy, twenty-one hours and a-half after death.—Body greatly emaciated. An abscess containing seven or eight ounces of pus in the right hip.

Abdomen.—At the umbilicus, there was a fistulous opening large

enough to admit a goose-quill. This opened into a sloughy "foyer," the size of a small orange, which communicated with the transverse colon and the duodenum, and indirectly with the gall-bladder. The opening into the colon was large enough to admit the finger; the colon at this place was much constricted, and its lining membrane injected and slightly ulcerated. Immediately to the right of this opening, the gall-bladder was firmly adherent to the colon. The gall-bladder was small and contained about two drachms of whey-like fluid, without any tint of bile; the cystic duct was obliterated, but there were no gall-stones. Between the fundus of the gall-bladder and the colon, was a fistulous communication, running somewhat obliquely, and just large enough to admit a No. 1. catheter. The inner surface of the gall-bladder around this opening was marked by an extensive radiated cicatrix. The fistula between the "foyer" and the duodenum was large enough to admit a crow-quill, and opened into the duodenum, immediately beyond the pylorus. The abdominal parietes around the "foyer" were inseparably adherent to the viscera, and there was no fluid in the peritoneum.

Chest.—About one pint of clear serous fluid in the left pleural cavity. A few old adhesions over apex of left lung, which, for the most part, was normal; but the lower lobe contained several nodules of lobular pneumonia, the largest about the size of a walnut, grey, granular, and bulging above surface on section, and very friable. Two or three pints of turbid serous fluid, containing numerous flakes of lymph in right pleural cavity; and lung glued to walls of chest, anteriorly and at apex, by recent lymph. Surface of right lung covered with flakes of soft, yellowish lymph. Lower lobe of right lung, collapsed, non-crepitant, sinks in water, smooth on section, and very tenacious.

Fully eight fluid ounces of a gelatinous, yellowish, opaque, puriform substance in pericardium, which could be scooped out in one semi-solid mass. This substance, on microscopic examination, was found to consist of fine fibrillated material with numerous lymph or pyoid corpuscles, but no true pus-cells, with characteristic nuclei. Pericardium inseparably adherent to left ventricle, over a space measuring an inch and a-half in diameter. Outer surface of heart covered with membranous patches of lymph, many of which were firmly adherent.

Remarks.—The sequence of events in this case was probably as follows:—

1. Ulceration of interior of gall-bladder from the presence of a gall-stone; formation of adhesions between gall-bladder and colon; perfora-

tion of coats of gall-bladder and colon; escape of gall-stone into colon; and establishment of a cystico-colic fistula.

2. Rupture of some abnormal adhesions of colon, and of wall of gut, by straining; escape of portion of contents of bowel into a circumscribed cavity, and formation of a fæcal abscess, which opens into duodenum, and likewise externally.

3. Pyæmia, abscesses, lobular pneumonia, pleurisy, and pericarditis.

The exudation into the pericardium was very remarkable in its character, and interesting in connection with the general state of pyæmia. At first it was thought to be pus, but this opinion was not confirmed by more careful examination. Hasse and Rokitansky have described exudations of lymph into the pericardium, very closely resembling what was observed in this case.

Dr. MURCHISON, 20th of November, 1860.

3. *Imperforate anus; the rectum opening into the vagina.*

The subject of this case was an infant, aged 3 weeks, in all other respects well developed, and whose death was unconnected with the malformation. The abnormal opening of the rectum was situated at the lower part of the vagina, near its outlet. During life, the bowels had always acted regularly without medicine, and their contents, so far as could be ascertained, did not constantly escape, but only at periodic intervals, as in a normal state of the parts. So little inconvenience had, indeed, resulted from the malformation, that it altogether escaped notice, until twelve days after birth had elapsed. The skin over the anal region had the usual dark and puckered appearance, and, on close examination, a small central indentation was observed, indicating the position for the anus, but no perceptible bulging of the integument occurred when the child coughed. After death it was ascertained that there was no further internal malformation, and that the rectum was undiminished in calibre as far as its outlet.

Mr. SEDGWICK, 20th of November, 1860.

4. *Imperforate anus.*

March 31.—A female child, 4 days old, was brought to the Civil Dispensary, Lucknow, with an imperforate anus. The abdomen was enormously distended with flatus, particularly over the arch of the colon; a large tumour was felt over the pubis, reaching up to the umbilicus; a small membranous sac existed anterior to, and connect-

ing the labia, through two small orifices of which urine was freely voided. Externally, there was an appearance of an anus, but the orifice did not exist, and no fulness could be detected by pressure on the perineum. The sac was opened throughout its whole length, with a view to ascertain if the gut might by possibility have terminated in the vagina, but it was not so. An incision was now made, fully an inch deep, into the perineum, and the finger inserted, but without finding any trace of a rectum. The child died on the sixth day after its birth.

Post-mortem examination, twenty-four hours after death.

The termination of the ileum in the colon took place in the left iliac region, where the caput cæcum and appendix vermiformis lay, the transverse arch of the colon passing from left to right and terminating in a very large cul-de-sac on the right iliac side. The sigmoid flexure was altogether wanting, and there was no rectum.

The colon was enormously distended with flatus, and the meconium was entirely confined to the small intestines. Besides the peculiar transposition of parts and defective organization, a tumour of the size of an orange occupied the hypogastric region; its walls were thick, and the contents fluid; it had two aë, right and left, about one inch and a quarter in length and half-an-inch in diameter. This sac proved to be the uterus and Fallopian tubes, enormously distended, and containing about eight ounces of serum with flocculent mucus floating in it. The bladder was normal, as were also the stomach, liver and spleen.

The infant did not appear to suffer much. There were no signs of peritoneal inflammation, and its death was caused apparently by inanition, as after the fourth day it refused to suck, and gradually sunk on the 6th.

J. C. LANGMORE, M.B., for Dr. FRANCIS, 20th of November, 1860.

5. *Cancer of the stomach.*

D. J., æt. 22, was admitted into the General Hospital, Wolverhampton, July 30th, 1860, under Dr. Millington. He is unmarried; by occupation a saddler; his parents and relations, on both sides, as far as he knows, have died from ordinary diseases. There is no history of cancer, and he never had syphilis.

About five years since he was induced to drink freely, and has continued to do so since, often getting drunk. About two years since he first began to be sick; the sickness always came on after each meal. The pain at the time was not very severe. Subsequently the vomiting

continued incessantly, and the patient emaciated considerably. No hæmatemesis occurred. He became so weak that he could hardly walk up the ward. His aspect was wan, withered and anxious, but not cachectic. Anorexia complete. He now complains of stomacheic pain, as well as constant vomiting. The pain comes on about an hour after eating.

On examination, owing to the sunken condition of the anterior abdominal parietes, a small tumour is visible in the epigastric region; to the feeling it is hard, nodulated and moveable, on pressure tender, and dull on percussion. The boundaries of the tumour are well defined, and correspond exactly to the pyloric end of the stomach. The cardiac portion of the stomach does not appear to be enlarged. No hepatic enlargement.

The vomited matters are large in quantity, and pultaceous.

No sarcinæ ventriculi are detected by a microscopic examination; a few blood discs are visible.

The attacks of vomiting are observed to occur usually once or twice in the twenty-four hours, and it is noticed that they occur much more frequently at night. This vomiting by night Dr. Millington believes that he has seen in previous cases, and thinks that further experience will show that the time at which the vomiting occurs may in doubtful cases aid the diagnosis. The paroxysms of pain were most violent, and required topical and internal remedies to relieve them. About two months after admission, the tumour enlarged considerably, and also became more painful when examined by the hand. He died on November 3rd.

Post-mortem examination.—It will suffice to say that all the organs were healthy except the stomach. Mesenteric glands slightly enlarged.

Mr. H. THOMPSON, for Mr. V. JACKSON, 4th of December, 1860.

6. *Rounded body in the peritoneal cavity, removed at an operation for hernia.*

A man was admitted to the South Staffordshire General Hospital, under the care of Mr. Nesbitt, suffering with a strangulated inguinal hernia. On operating, besides the bowel which was returned, a rounded body with smooth surface, and about the size of a nut, was seen attached by a very small pedicle to the omentum, also forming part of the hernia. It had been distinctly felt in the hernial sac before it had been opened.

It appears to have precisely the same physical characters as those loose bodies occasionally found in the peritoneal cavity, several of

which were carefully described in the sixth volume of the Society's *Transactions*.

MR. HENRY THOMPSON, for MR. NESBITT, 4th of December, 1860.

Report on the above specimen.—After examining the oval body found in a hernial sac, we are of opinion that it resembles very closely other specimens which have been exhibited to the Society, and especially one shown by Mr. Shaw, and described and figured in Vol. VI. of the *Transactions*. The shape is egg-like, half-an-inch in short diameter, and at the smaller end are evidences, tolerably distinct, of the former existence of a pedicle of attachment. This pedicle is seen, on section, to be continuous with a mass of adipose tissue, somewhat condensed and convoluted and making up the principal bulk of the body. At the edge of this is a thin layer of hard, gritty, calcareous crust. Investing this externally is a dense capsule cutting like cartilage, and appearing on section like hard-boiled white of egg. Under the microscope, this outer rind, when pared in cross section, exhibits a fibrillated appearance, but in a flat section presents distinct appearances of a laminated homogeneous character. We think that the characters presented by the substance fully corroborate the opinion expressed on a former occasion, that this is an 'appendix epiploica,' altered in the manner here seen.

Dr. WILKS,

Mr. JOHN WOOD, 18th of December, 1860.

7. Cancerous growth surrounding the rectum.

Mr. K., æt. 44, came under my treatment on 20th Sept., 1860, at the Royal General Dispensary, Bartholomew Close, for incessant diarrhœa and great loss of blood, with occasional vomiting. He had been under medical care for the same symptoms, during the preceding twelve months, at the same institution and at Bartholomew's Hospital. Both the diarrhœa and discharge of blood were occasionally stopped, but he gradually sunk, and died on the 22nd December, 1860. He never complained of pain, nor was there ever any difficulty of micturition. No tumour could be detected by palpation.

At the *post-mortem examination*, there was found a considerable quantity of yellow serum in the abdomen. The liver was flabby, slightly congested, and the intestinal canal healthy as far down as the commencement of the rectum. The latter was surrounded by a large cancerous deposit, filling up the whole of the lower portion of the pelvic cavity, extending to the posterior and inferior portions of the

bladder, to which it was closely attached, and communicating with the internal surface of the rectum. A tumour, of the size of a duck's-egg, was found upon the upper border of the psoas muscle in close contact with the aorta, some fibres of the sheath of which formed the principal portion of the sheath of that tumour. A similar tumour occurred in close connection with the internal iliac artery. They both presented the characteristics of enlarged glands. The cancerous mass was firmly attached to the ligaments of the sacral bone. The patient had never heard of cancer having occurred in the families of his parents. About the age of 14 or 15 he had received a severe kick over the sacrum, from which he suffered some time.

Dr. MAURICE SCHULHOF, *1st of January, 1861.*

Report on the above specimen.—The parts submitted to examination consisted of the lower four inches of the rectum, a portion of the posterior wall of the bladder, a mass of morbid tissue connecting the bladder and the rectum, and two detached lymphatic glands, about the size of a walnut and a hen's-egg.

The greater portion of the rectum appeared healthy; but its coats, at its lower extremity, to the extent of an inch, were thickened and indurated from the infiltration of morbid matter. The morbid material was deposited in the submucous tissue and the muscular coat. The channel of the gut was here somewhat constricted; but there was no ulceration of the mucous membrane. Externally, the diseased intestine was continuous with the morbid mass, which connected it to the bladder.

This mass was of an irregular form, and about the size of a man's fist. When cut into, it presented a dense, somewhat translucent, greyish-white structure, from which a quantity of milky juice exuded on pressure. Under the microscope, this juice was found to contain numerous cells, with an average diameter of $\frac{1}{2000}$ inch, and some of them as large as $\frac{1}{500}$, of an oval, globular, or caudate form, and furnished with one, and sometimes two, large nuclei, with a diameter of about $\frac{1}{3200}$ inch. There were also numerous free nuclei, and a quantity of oil-globules and molecular matter.

The detached glands were of much softer consistence, and, when cut into, were found to consist of a yellowish-white opaque material, containing a large quantity of custard-like juice, which, under the microscope, presented the same appearances as the milky juice from the denser tissue, except in so far as it contained a number of compound granular cells, and a much larger proportion of oily matter.

We consider the preparation to be an ordinary example of cancer,

originating in the submucous tissue of the rectum, extending to the cellular tissue of the pelvic cavity, contracting adhesions to the bladder and surrounding parts, and involving the lymphatic system.

Dr. MURCHISON,

Mr. T. J. ASHTON, 5th of February, 1861.

8. *Case of colloid cancer illustrating the independent vitality of the cancer cell.*

The woman, æt. 42, from whom this preparation was taken, became a patient at St. George's Hospital on the 6th of last June. For the three preceding months she had observed that her abdomen began to increase in size. This was at first without suffering, but after a few weeks she began to have severe pains, with much tenderness, about the epigastric and hypochondriac regions. When she was admitted, there was much abdominal tension, with universal fluctuation. There was resonance at the epigastric region, but the tenderness here, and beneath the right ribs, was so great, that no satisfactory examination could be made. As it was, the resonance could not be made to vary with the position of the patient. The catamenia were regular. The swelling continued to increase, so that the abdominal distention was excessive. The heart was much displaced upwards. The legs swelled, and the breathing was much embarrassed. An attempt was made on the 10th of August to relieve her by paracentesis, but no fluid escaped. A small quantity of gelatinous matter was found in the tube of the instrument. Three weeks afterwards, at the urgent request of the patient, the operation was repeated with the same want of success.

Shortly after this she expired, suffering very greatly from want of breath, with rigid orthopnoea.

Post-mortem examination, thirty-three hours after death.—The lower extremities were œdematous. A little atheroma existed on the mitral valve, and there was a little fluid in the pericardium. On laying open the abdomen, it was seen that the peritoneal cavity was full of variously-coloured gelatinous fluid. This had come out of a large multilocular cyst, which occupied almost the whole abdomen, and communicated freely with the serous cavity by a wide irregular opening at its anterior part. This cyst, or rather collection of cysts, was traced down to the broad ligament of the uterus, where it appeared to occupy the situation of both ovaries, as neither of them was discoverable.

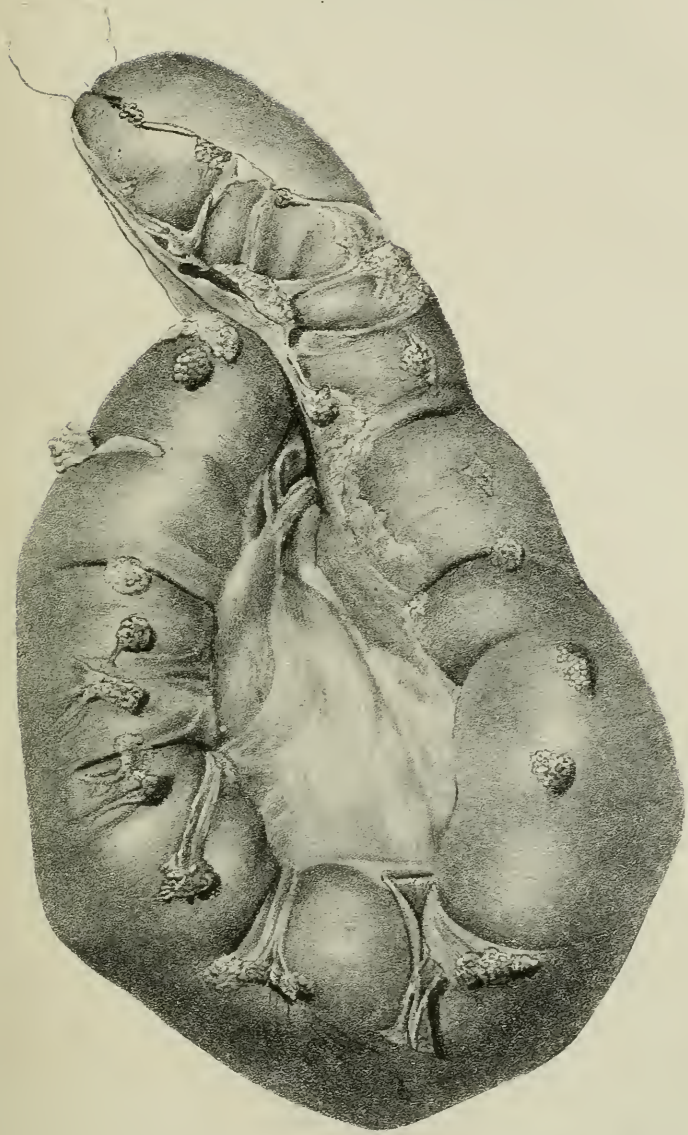
The uterus was healthy.

At the upper portion, the peritoneum was matted together, the great

DESCRIPTION OF PLATE IV.

Illustrating Dr. Dickinson's observations on the Independent Vitality of the Cancer-cell, in a case of Colloid Cancer of the Intestine, p. 93.

On the portion of intestine, represented in the Figure, numerous small granulated tumours of cancerous material are seen attached, some by a broad base, others by a very slender pedicle, which, when present, was occasionally found of considerable length.





omentum converted into a mass of cells, and the various folds covered with lymph. The intestines were mottled with vascularity, their interstices being occupied with the gelatinous fluid before mentioned. The peritoneal surface of the diaphragm, the corresponding surface of liver, and all the more superficial folds of the intestine, were studded with small masses of colloid cancer (Plate IV.), some attached by a broad base, others hanging by a slender stalk, looking exactly like blackberries in shape and size, but semitransparent and nearly colourless. The stomach was smeared with lymph. There was a good deal of gelatinous matter about the spleen, but that organ was itself healthy.

The gelatinous material had evidently escaped from the cyst, in the position of the puncture made during life, and had spread itself through the peritoneal cavity just as would have been expected. It lay, in considerable quantities, all about the opening, and was most abundant between the intestines in the neighbourhood, among those, that is, beneath the abdominal vessels. It had also penetrated into the space beneath the diaphragm, and filled most of the intervals about the liver, stomach, and spleen. Wherever this fluid had penetrated, it appeared to have sown the little cancerous tumours described. These were merely congeries of small cysts, varying in size from a small blackberry to a raspberry; their attachment was sometimes extremely loose, and in all cases they appeared not to have originated within the tissue to which they were attached, but to have fixed themselves upon the outside like barnacles upon a ship. The particles by which the disease was propagated had no doubt escaped through the puncture made in the cyst, and must have possessed sufficient independent vitality to enable them to fix themselves upon the surfaces with which they came in contact.

Under the microscope, the structure was found to consist of a network of fibrous tissue, containing in the interstices a great number of globular or ovoid bodies of finely granular structure. These had the appearance of loose nuclei. They were somewhat larger than pus corpuscles. They were unaltered by acetic acid. Many prismatic and needle-shaped crystals were also seen, probably produced by the action of the spirit in which the specimens had been preserved.

Dr. W. M. H. DICKINSON, 15th of January, 1861.

Report on the above case.—We have examined the specimens of peritoneal disease, exhibited by Dr. Dickinson at a former meeting of the Society, and concur in the opinion which he has expressed as to their nature. The diseased structure entirely agrees, both in its

increased flow of saliva and vomiting of the food, soon followed. He had in consequence been long compelled to eat very sparingly, and in particular to abstain from meat. Slight soreness and pain were experienced under the cartilages of the left ribs; and in the same position undue dulness on percussion, and a sense of resistance were noticed. One day, about a fortnight before his death, upon which he had not swallowed anything, he vomited, in Dr. Leared's presence, a small quantity of a ropy yellowish fluid. On examination under the microscope, this was found to contain an abundance of many-nucleated cells of various sizes. No doubt now remained that a cancerous tumour of the cardiac orifice of the stomach existed. For many days preceding death he was entirely supported by nutritive enemata.

Autopsy.—The body was extremely emaciated. The stomach was empty and contracted, and a tumour involving its cardiac orifice extended three inches upwards. This tumour consisted of nodular masses surrounding the œsophagus, the largest being somewhat circular, about an inch in diameter and more than half-an-inch in thickness. The cardiac orifice of the stomach was contracted, so as only to admit the passage of an ordinary sized cedar pencil. The mucous membrane, which corresponded with the extent of the tumour, was almost entirely destroyed by ulceration. The adjoining glands were enlarged and indurated.

The diseased masses presented on section, and when examined under the microscope, the usual appearance of scirrhus. In addition, however, a few large cells presenting the nested appearance of those found in epithelioma were found intermixed, even in the interior of the morbid growths.

DR. LEARED, 5th of February, 1861.

12. *Intestine, presenting cicatrices and unhealed ulcers, with sloughing of the mesenteric glands, from typhoid fever, after relapses; also the pancreas and duodenum, exhibiting destruction of the areolar tissue between the acini of the former, and perforation of the muscular coat of the latter, through abscess in the contiguous tissues.*

A youth, æt. 19, residing at Greenhithe, was attacked about the 6th of October, 1860, with symptoms of typhoid fever, apparently so mild as to allow him to come every day to town; was seen by Dr. Hermann Weber for the first time on October 10th; had no decided rose-spots, but the spleen was rather large. On October 22nd, he felt quite well, the fever had left him, the bowels were regular. On the evening of October 27th, after having removed from Greenhithe to Bloomsbury, he

became again feverish; dryness of tongue and diarrhœa soon succeeded; there were a few red spots on the abdomen, but not characteristic; spleen enlarged. After November 24th, he appeared again convalescent, there was no pyrexia during the day, and scarcely any at night; the tongue moist; constipation instead of diarrhœa; no pain or tenderness of abdomen. On December 1st, return of pyrexia, with dry tongue, diarrhœa and abdominal pain, followed after a few days by great depression of the action of the heart; from the 10th, a rather profuse discharge of viscid transparent saliva. After December 18th, there was again a decided improvement; but the abdominal pain did not altogether disappear, and there remained some slight tenderness in the umbilical region, though not at all times perceptible. In the beginning of January, a fresh exacerbation of abdominal pain manifested itself, with increased pyrexia, great sensitiveness of skin and muscles to the touch, and "wandering pains;" on January 5th, 6th, and 7th, in the afternoon, distinct rigors; on the 14th, swelling of the right parotis, rapidly increasing until January 19th, when the patient died, greatly emaciated,—at the end of the fifteenth week from the first symptoms of typhoid fever.

Post-mortem examination.—Lungs, heart, liver, kidneys and suprarenal capsules normal. Spleen large, rather pulpy, dark-coloured. The peritoneal cavity contains about eight ounces of transparent serum. In the lower portion of the ileum are the remains of ulcers, as well of Peyerian patches as of solitary glands; those nearest to the ileo-cæcal valve are completely cicatrized, but between about seven and nine inches from the valve are several ulcers with slightly elevated margins, not yet quite healed—the surrounding parts of all the cicatrices and ulcers having a dark slate-colour, caused, as shown by the microscope, by the deposition of pigment within the tissue. The upper portion of the ileum and jejunum normal. In the cæcum and ascending colon there are some small slate-coloured, round cicatrices, but no unhealed ulcers. The mesenteric glands are not much enlarged, but some of them exhibit a whitish-yellow slough, the surrounding tissue being likewise slate-coloured. Over the head of the pancreas, and extending to the perpendicular portion of the duodenum, is an abscess, containing about an ounce of thick pus, which has involved the adjacent tissues, burrowed between the acini of the head of the pancreas, and destroyed, at a spot of the size of a sixpence, the muscular coat of the duodenum, the mucous membrane on the corresponding part being softened but without breach of continuity. The portal vein contains a pale, rather dry, only slightly adherent clot, the walls of the vein being unchanged.

The areolar tissue of the right parotis is penetrated with thick pus.

Amongst the points of interest, connected with this case, Dr. H. Weber alluded especially to four:—

1. The relation between the *ulcers of the ileum and the relapses*; viz., whether the healed and unhealed ulcers were due to separate outbreaks, as it appeared in Dr. Peacock's case, published in the "Transactions of the Pathological Society," Vol. IX., p. 209, or whether they belonged to the same outbreak, or rather the same series of outbreaks. Dr. H. Weber was inclined to adopt the latter view, adducing as reasons, the similarity of the appearance of the surrounding tissue, and the fact, that the ulcers nearest to the ileo-cæcal valve, therefore, probably the oldest, were healed, while some of those higher up in the ileum, probably from a later series or crop of the same outbreak, were not yet healed, their cicatrization having perhaps not been completed, when the first or second relapse occurred.

2. The *abscess over the pancreas* was attributed to a kind of pyæmia, or rather septicæmia, caused by the ulcers of the intestines or the sloughing of the mesenteric glands. The profuse secretion of viscid saliva about December 10th (second relapse), and the following days, was ascribed to the affection of the pancreas, leading, through the analogy of function, to the irritation of the salivary glands.

3. The *purulent parotitis* was likewise regarded as the result of the blood-infection. The question offered itself, whether the analogy of function with the pancreas might be the cause of the affection of the parotis, and Dr. Weber mentioned, that the only other case of purulent parotitis after typhoid fever, which he had the opportunity of examining, had likewise presented an abscess behind the peritoneum, involving the pancreas; but he was not yet disposed to assert that this was more than coincidence.

4. Concerning *the relapses*, the case was looked upon as illustrating, that relapses in typhoid fever need not depend on fresh irritation of the intestine, but may be caused by sloughing of the mesenteric glands, abscess behind the peritoneum, and many other secondary affections, and that the patient's condition during a so-called relapse of typhoid fever widely differs from that during the typhoid fever itself.

Dr. HERMANN WEBER, 5th of February, 1861.

13. *Infiltrated scirrhus stricture of the œsophagus, implicating the trachea.*

E. K., æt, 53, was admitted into University College Hospital on the 12th of November, 1860, in a very emaciated condition, but without any marked cachectic aspect. She complained of great difficulty of swallowing, which had gradually increased for the last twelve years, so that on admission the passage of solids was impossible, and liquids passed only with great discomfort. The attempt to swallow solids was followed by a severe attack of dyspnœa, relieved by the ejection of the matter; liquids could merely be taken in sips. Respiration was laborious, and it was impossible for her to lie down from the great dyspnœa caused, so that it was necessary to support her in a bed-chair. The breath sound was tracheal in character over a considerable portion of the chest. The difficulty of respiration began after the dysphagia. She pointed to the upper part of the sternum as the seat of her evil, but no displacement of the trachea or adjoining parts could be seen, nor any swelling felt; any pressure, however, made on this part produced dyspnœa. The heart's sounds were normal, and no murmur or enlargement of any great vessels could be detected.

The treatment throughout was merely palliative. She left the Hospital in the same condition, on January the 15th, and lingered on for a few weeks, when she died of inanition.

Post-mortem examination, forty-two hours after death.—Rigor mortis slight, little or no subcutaneous fat.

(The chest was first opened, the pneumogastric nerves carefully traced, and the tongue, pharynx, œsophagus, trachea, heart and lungs removed "en masse.") The lungs were highly emphysematous, filled both cavities of the chest, and did not collapse on exposure. The lobules were remarkably defined by pigment; there were no tubercles or any other adventitious matter in the interior; both were loaded with frothy serum. A few old pleural adhesions were observed, but no fluid in either pleural cavity. Around the root of the left lung were some small greyish, softish masses, not examined by the microscope (encephaloid?). On the left side, the posterior pulmonary plexus was found slightly spread out over a few glands, on the right considerably so, over a gland as large as a nutmeg.

The œsophagus was strongly adherent to the vertebral column for about one inch and a-half, opposite and below the cricoid cartilage, so that complete detachment was impossible without perforating it behind; at this part the tube was much thickened and greatly constricted, the

constriction extending down about two inches. The substance of the œsophagus was very hard to the finger; on opening it no ulceration was detected, but a number of large lacunæ were seen. It did not creak on section. The recurrent laryngeals were not pressed on in their transit, but became blended with the mass.

The trachea was opened, and its tube was found so narrowed, from a tumour projecting from behind, as not to permit the passage of the stem of a tobacco pipe. This tumour, which was blended with the œsophagus, was immediately below the cricoid cartilage, of the size of an olive, smooth, rounded, oval, fusiform, and one inch and a-half long, and extending over eight rings of the trachea.

There were a number of enlarged glands on either side of the trachea, and one very large one in the posterior triangle. On being opened, the centre was found soft and pultaceous, and made up chiefly of fat, tuberculous matter, and cholesterine, but no cancer cells. The cells from the œsophagus were caudate, fusiform, and rounded, with two or three well-marked nuclei. The other organs were perfectly healthy, with the exception of an apoplectic clot in the liver.

Dr. EDWYN ANDREW, 19th of February, 1861.

Appendix to the above case.—The patient had been under my care before going into University College Hospital, and was examined by the laryngoscope, but the results were negative, because the tumour was situated in the *posterior wall* of the trachea, the only part which cannot be seen by the instrument.

The trachea consisted of seventeen rings, was three inches and a-quarter long; and at the commencement of its upper half, was a tumour, which extended to within a-quarter of an inch of the cricoid cartilage. This tumour was oval, one inch and a-quarter long and a little over three-quarters of an inch broad; it almost wholly blocked up the trachea, and had grown from behind forwards, encroaching on the centre and left side of the tube. It was in communication with the cancerous disease of the strictured œsophagus. The stricture of the latter commenced half-an-inch below the cricoid cartilage, and extended one inch and three-quarters; in its narrowest part it was not wider than one-eighth of an inch, and throughout it was very narrow. The mucous membrane was ulcerated and involved in the cancerous disease. The œsophagus was surrounded by enlarged lymphatic glands but unaffected with cancer. The superior part of the arch of the aorta, and the interior of the great vessels springing from it were studded with atheromatous patches, not ulcerated.

Dr. GIBB, 19th of February, 1861.

14. *Cancer of the œsophagus ; exostosis of vertebræ.*

Although this case presents no features of importance in itself, it would have been extremely interesting had the disease been of the nature supposed by the gentleman who forwarded the specimens for exhibition. The cause of mistake made by him being not very uncommon, we think it of sufficient interest in this point of view to bring it before the notice of the Society. A woman had suffered long from stricture of the œsophagus, the ordinary symptoms existed, and a probang met with resistance at a certain spot in its passage.

On *post-mortem examination*, an exostosis was found projecting from one of the dorsal vertebræ, and over which the œsophagus was passing; this was supposed to be the cause of the impediment, and the parts were sent to us for further examination.

On opening the œsophagus, a cancerous ulcer was found. This was quite sufficient to cause the obstruction, and, moreover, was situated opposite the bifurcation of the trachea, whereas the exostosis was in the lower dorsal region. Had the supposed cause for obstruction been the real one, the case would have been valuable as a contribution to pathology, but we think the mistake may be also made of value, as a hint, that too much importance should not be attached to these exostoses, in explanation of obscure causes of disease. We say this, because we have seen similar exostoses regarded as a cause for jaundice, by pressure on the choledic duct; and because they have also been looked upon as one cause of disease of the spinal cord. Thus the late Mr. Aston Key related in the "Transactions of the Medico-Chirurgical Society" some cases of paraplegia, in which the cause of the paralysis was supposed to be the affection named. Some of these specimens are still in Guy's Museum, and, we think, do not by any means warrant the conclusion which has been drawn from them. It should be remembered, that amongst the working classes, such exostoses, or bony projections from the junctions of the vertebræ, are very common. A very large proportion of labouring men above middle life possess them; and if looked for, they will be found after death.

Dr. WILKS, 19th of Febuary, 1861.

15. *Congenital stricture of the duodenum.*

The case, from which the specimen came, occurred in the practice of Mr. Galton, of Brixton, who gave the following history. The child when born was well formed, and presented no unusual appearance. Nothing was observed to be amiss, for the first twenty-four hours, when

vomiting of meconium came on, and continued, with short intermissions, for fourteen hours, during the last two of which, convulsions supervened; death then taking place, apparently from exhaustion. The bowels were never relieved. The only food given was, owing to the mother's inability to suckle, a small quantity of gruel.

The *post-mortem examination* showed all the organs to be healthy; the abdomen was not distended, the stomach contained a greenish fluid, the small intestines were empty and flaccid, while the large were distended with meconium. The only disease found was a stricture of the duodenum (Plate V.). This was situated immediately over the duct, so that a probe, passed down the latter, entered the duodenum close to the constriction, but below it. There was no disease of the mucous membrane, nor were there any inflammatory products observable externally, to indicate in what manner the constriction had occurred. On the gastric side of the latter, the duodenum was immensely distended, so much so, indeed, that at first sight it appeared like the pyloric end of the stomach itself; and it was not until further examination had taken place, that the apparent stomach was seen to have a ridge running around the junction of its upper two-thirds with its lower third, which proved to be the pylorus, marking the division between the real stomach and the duodenum.

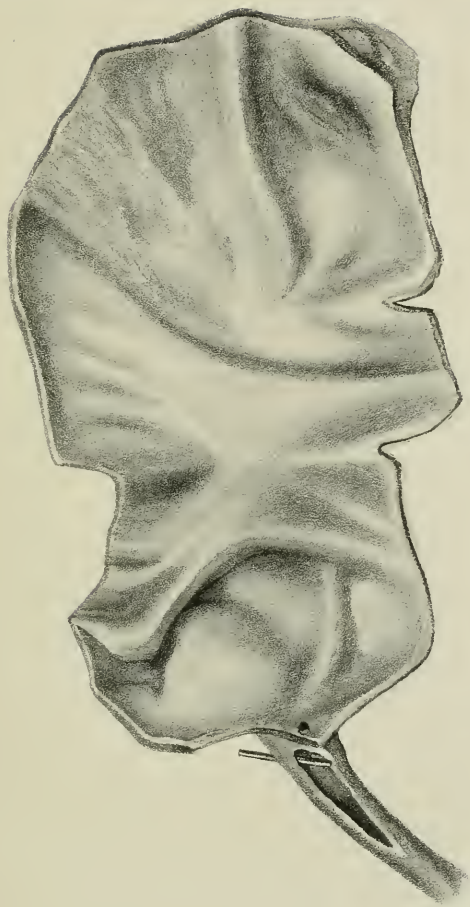
The cause of the stricture was not clear, whether a real malformation, due to some error in the process of development, or arising from the cicatrization of an ulcer. The absence of discharge of meconium from the rectum, during the lifetime of the child, appeared to be merely accidental, for there was no cause to show why an evacuation should not have taken place, had life been prolonged a few more hours. The supposed vomiting of meconium presented some difficulty, since the gall-duct was entirely cut off from the stomach; the fluid ejected must have been the gastric secretion itself; and the force with which this quantity must have been poured out, was shown by the immense dilatation of the duodenum. We have always thought, that this remarkable dilatation of the various cavities of the body, by their secretions, is explicable on the theory which we heard propounded many years ago by Mr. Cock, in reference to the large effusions of blood, which sometimes take place, upon the rupture of a small blood-vessel; the explanation being, that it occurs on the principle of the hydraulic press. Thus a small stream of blood, issuing out into a space filled with the same fluid, exerts an immense pressure in the same way as the water-engine; and, also, a secretion from a small tube produces a similar effect on the cavity into which it is poured. DR. WILKS, 19th of February, 1861.



DESCRIPTION OF PLATE V.

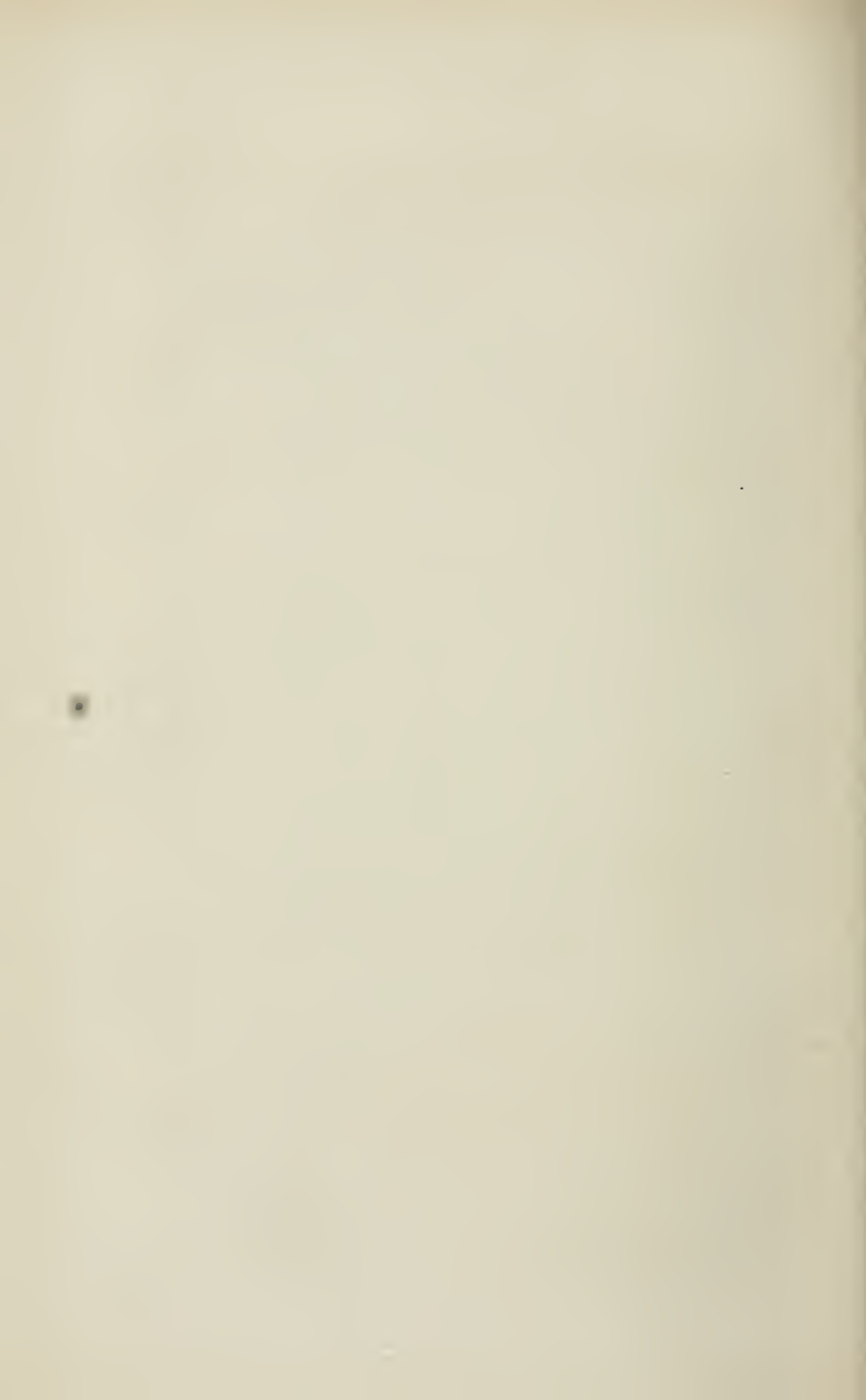
Illustrating Dr. Wilks's case of Stricture of the Duodenum, p. 102.

The parts are represented of the natural size; a probe is seen passed into the ductus communis choledocus, entering the duodenum close to, but below, the seat of the constriction.



W. Hurst, del. R. W. West, lith.

W. West, imp.



16. *Case of internal strangulation of a large portion of the ileum.*

The subject of this unusual accident was a sergeant's wife, æt. 36, a stout, well-grown woman, the mother of four children, the youngest of whom is now nine years old. Since the birth of this child she has had one miscarriage.

On the night of February 13th, she was suddenly attacked with violent colic pain, as she was in the act of unlacing her boots: the pain was soon followed by sickness, and continued all night and until noon of the next day, when she was first seen by the writer. She was then complaining of severe pain in the left side of the abdomen, flatulence and occasional retching: she had the aspect of a patient with strangulated hernia; but no swelling or tenderness could be detected at any of the usual seats of hernial protrusion. Her bowels were once relieved freely by an enema, and opium was given in large doses, but without any great mitigation of her sufferings. The signs of peritonitis soon appeared, and were followed by collapse and death, on the morning of the 16th.

At the *autopsy*, the belly was found to be very tympanitic, and on its cavity being opened the stomach and small intestines were seen greatly inflated, while the colon was empty and flaccid. The lower part of the ileum was of a deep crimson hue, and some of its convolutions were chocolate-coloured, and adhering to each other by fresh lymph. On pressing the bowels aside, the uterus came into view, lying high above the bladder, and in an oblique direction, with its right cornu drawn up toward the spine, and closely attached to the coats of inflamed bowel by its broad ligament. The nature of this attachment could only be made out when the parts were removed and carefully examined. It then appeared that the inflamed bowel was constricted at two different points, one of which was a loop formed by old adhesions between the right broad ligament of the uterus and the mesentery; the other being a simple fissure in the peritoneal fold forming the false ligament of the same side. Through the latter, which was the higher aperture, about forty inches of the ileum had passed, the stricture being drawn very tight by the weight of the bowel, so that the serous membrane forming it was not thicker than a loop of twine. The bowel could then be traced through the second point of constriction, which included about ten or eleven inches; the aperture consisting of a loose ring of considerable thickness, which had probably existed in its present condition for some long time; here, the bowel was simply incarcerated. After a careful consideration of the parts, the following explanation of this

singular displacement suggested itself to the writer. The unusual position of the uterus, which was the primary cause of the strangulation, may have occurred in one of the woman's pregnancies through inflammation of the right broad ligament and its adhesion to the mesentery, whereby the uterus was prevented from returning into the pelvis after her delivery, and remained suspended across the brim in the oblique position already noticed; while the peritoneal reflection of the broad ligament being put on the stretch became fissured, and through the opening thus made, a loop of intestine had dropped, passing afterward through the ring formed by the adhesion of the broad ligament, above mentioned. The bowel may have remained in a state of incarceration for a long time without causing further inconvenience than the flatulence to which the patient was always subject; then, on the night of her last attack, a fresh portion of bowel slipped through the upper aperture only, the peristaltic action forcing it onward, until its further advance was stopped by the fixed position of the cæcum, and complete strangulation ensued.

The parts involved after being exhibited to the Society, were presented to the Museum of Guy's Hospital.

Dr. QUAIN, for Mr. H. S. TAYLOR, 19th of February, 1861.

17. *Stricture of the œsophagus from malignant disease.*

The disease was situated at the junction with the pharynx, and engaged the back part of the larynx also. It was removed from the body of a seaman, æt. 69, who had been, for upwards of twelve years, a pensioner in Greenwich Hospital, and had never complained until five weeks ago, when he presented himself suffering from difficulty of deglutition, hoarseness and some dyspnœa, which he said had been coming on slowly for some months. He felt that solid food was obstructed at a point opposite the cricoid cartilage, but he could swallow fluids, and his appetite was good. There was nothing apparently wrong with him as far as the eye could detect; and, on carefully exploring the chest, nothing abnormal was observed, except an absence of vesicular breathing over the right chest in front, which, however, sounded clear on percussion. On a very deep inspiration or cough, air could be heard entering the lung. A probang, and afterwards an œsophageal tube, were carefully passed down the œsophagus until arrested by what appeared to be a stricture about the point referred to by the patient. A bougie about a quarter of an inch in diameter was passed through the

obstruction. On withdrawing it some bloody mucus adhered to it, which under the microscope showed pavement epithelium, blood-corpuscles, mucous cells, and a great number of irregularly-shaped cells, partly fibrous, partly epithelial. There was no enlargement of the glands.

During the five weeks he was in the Infirmary, he suffered from paroxysmal attacks of dyspnœa, which generally came on towards evening and continued all night. His sufferings were alleviated by various anodynes and antispasmodics.

Tracheotomy was always held in view, and would have been performed, but that, towards the close, the patient's sufferings were not so great as when he was first seen, and the extremely rapid emaciation and prostration of strength forbade hope from any operative proceeding.

He stated that his mother had died of a similar disease.

Dr. DAVIS, *5th of March*, 1861.

Report on the above case.—The pharynx and œsophagus, in the specimen under report, having been already laid open, there is exposed an ulcerated surface of a somewhat diamond shape, the upper angle of which reaches to the anterior extremity of the aryteno-epiglottidean folds of mucous membrane. Below, the mucous membrane of the œsophagus, to the extent of an inch, is encroached upon. The breadth of the ulcer includes the whole width of the larynx. For the most part the ulcer is superficial, the edges are slightly raised, everted and fungating; on the right side, however, the arytenoid cartilage has totally disappeared, the crico-thyroid articulation remaining perfect; on the left side, the arytenoid cartilage is necrosed and fragmentary, the crico-thyroid articulation is destroyed, and a large portion of the back of the cricoid itself is necrosed and loose. The truncated extremity of the right superior laryngeal nerve may be seen forming part of the floor of the ulcer. This exposed portion of the nerve appears to have undergone infiltration of cancerous material, being developed into a bulbous swelling, about the eighth of an inch in diameter. The corresponding superior laryngeal artery lies on the floor of the ulcer cleanly dissected, but not corroded by the ulcerative process. The left superior laryngeal nerve, although less involved, is somewhat enlarged at the point of its entrance into the cavity of the larynx. At the junction of the œsophagus with the pharynx, and upon the upper rings of the trachea, there lies a nodule of cancer, as large as a hazel-nut. Microscopic examination of the matters removed from the surface of the ulcer by scraping,

and of sections of the fungating edges, discovered abundantly the presence of the nucleated cell-growth, characteristic of (so-called) epithelial cancer.

Mr. NUNN,

Mr. HULKE, 19th of March, 1861.

18. *Intestinal obstruction, by old adhesions, with strangulated femoral hernia, below the point of stricture.*

L. H., a woman, æt. 70, had previously suffered from several attacks of abdominal pain, with constipation, and was admitted into St. Mary's Hospital on February 10th; having, for some days, had complete obstruction of the bowels, with stercoraceous vomiting. The extremities were cold, the features pinched, and the pulse at the wrist imperceptible. The stercoraceous vomiting continued, and enemata failed to bring anything away from the bowels. She was carefully examined, but no tumour could be discovered in any of the usual situations of hernia, nor did tenderness exist at any point. The patient was exceedingly fat. She died soon after admission.

On opening the abdomen, many old adhesions were seen, and the omentum was stretched tightly across the subjacent intestines from the stomach and colon to the right crural ring, in which it was firmly fixed. When this was turned aside, the intestine was seen to be greatly contracted, and a knuckle of it passed into the crural ring, constituting a femoral hernia. When the sac was opened, two distinct processes of omentum were found adherent to its interior, and a small piece of intestine, about the size of a nut, almost black and very tense. It was seen, however, that the intestine was equally empty and contracted above and below the hernia, having a diameter not larger than the little finger, while the greater part of the small intestine was enormously distended. The junction between the constricted and dilated portions of the intestine was deep in the pelvis on the left side, and abrupt. At this point, a strong band of adhesion stretched from one coil of intestine across another coil, to which it was also adherent, to be attached to the uterus; and it was here that the obstruction occurred, by the constriction of the intermediate coil of intestine. The knuckle of intestine, contained in the hernia, was eighteen inches from the ileo-cæcal valve, and from the hernia to the obstruction was four feet.

It seems probable that the obstruction by the organized band of lymph was the cause of the symptoms; and that the knuckle of intestine was forced into the femoral canal during the violent vomiting.

Dr. W. H. BROADBENT, 19th of March, 1861.

19. *Inguinal hernia returned "en masse."*

C. M., a man, æt. 76, from whom the specimen was taken, was brought into St. Mary's Hospital, on May 3rd, 1860, with stercoraceous vomiting, and almost in a state of collapse. He had had, for several years, left inguinal hernia, and a week before admission this became strangulated, with the usual symptoms—tenderness in the part, obstruction of the bowels and vomiting. The medical man, first called in, was unable to reduce the hernia, but, with the aid of a second practitioner, and after prolonged and forcible effort, it was at last returned. The constipation and vomiting, however, continued, and he was brought to the Hospital.

A small tumour was found in the inguinal canal of the left side, but there was no pain or tenderness at this part, or over the abdomen, and the tumour was returned with great facility. The finger could be passed well into the canal, and only a scarcely perceptible fulness remained in the region of the internal ring. It was not considered advisable to operate, and the patient shortly died.

On removing the integument and superficial fascia, the tumour was seen presenting at the external ring, being apparently about the size of a pullet's-egg, and it moved readily up and down the inguinal canal. When the abdomen was opened, a portion of the ileum was seen to enter the internal ring, carrying before it a sac of peritoneum, the bowel above this part being greatly distended, that beyond it, empty and contracted. The neck of the sac did not appear to be very tight. When the tumour was pushed out of the canal towards the abdomen, the peritoneum was raised from the subjacent fascia, leaving a space in which the entire hernial sac with its contents appeared to be lodged. The peritoneum was not divided so as to ascertain the precise condition of the sac, till the specimen had been exhibited to the Society.

Dr. W. H. BROADBENT, 19th of March, 1861.

Report on the above specimen.—It appears that the intestine, strangulated, has been pushed through the site of the internal ring, carrying with it the neck of the sac, or, at least, that part of the neck of the sac constituted by the peritoneum. The whole of the peritoneal sac was not returned; about one-half remains in the inguinal canal. The sac itself evidently contained much serous fluid; a considerable quantity of blood-stained albuminous material, coagulated by the action of the alcohol in which the specimen was preserved, still remaining. After being pushed beyond the abdominal wall, inwards, the bowel had fallen

a little inwards, so that it lay behind the conjoined tendon; and was, consequently, thereby prevented from returning again into the inguinal canal, and became, as it were, blocked. The gut had become slightly adherent to the sac, in the immediate neighbourhood of the constricting neck. The neck of the peritoneal sac was much thickened, and presented towards the bowel an exceedingly sharp and rigid edge. The spermatic cord was wedged between the sac and the edge of the conjoined tendon. In short, the essential feature of the case is, that the bowel, carrying with it the peritoneal sac, entered the cavity of the abdomen, and was prevented from again making its exit through the internal ring, by becoming entangled between the peritoneum and conjoined tendon.

Mr. NUNN,

Mr. HULKE, 2nd of April, 1861.

20. *Malignant disease of the œsophagus, ulcerating into the subclavian artery.*

The patient, who was a sallow, emaciated individual, æt. 44, said that he had had good health until four weeks before he came into the Hospital, when he began to experience difficulty in swallowing, with a sense of obstruction in the throat. He had no pain, except a little between the shoulders. He was unable to swallow solids at all, or liquids, except in small quantities. There was no external appearance of disease connected with the œsophagus, and there was no want of resonance to indicate any tumour within the chest. Before he had been in the Hospital a week, he died in a very unexpected manner. During the night, (two A. M.) he felt a desire to relieve his bowels, and while making his way to the water-closet, he fainted. On his recovery, he passed a motion containing a considerable quantity of blood. At eight o'clock he vomited a little blood, but was, nevertheless, able to get up and wash himself. He remained without much further change till 10, when he somewhat suddenly fell into a state of syncope, and died.

When the body was examined, it was found that there was a tight stricture of the œsophagus, about three inches below the orifice of the larynx. This would hardly admit the finger. For about three inches below this, the whole circumference of the tube was deeply ulcerated. In connection with this, was a large mass of encephaloid disease, which surrounded the great vessels at the root of the neck. The left subclavian artery communicated with the ulcerated surface by a small opening, just large enough to admit a common probe. Through this the

fatal hæmorrhage had taken place. A large quantity of blood was found in the stomach and intestines.

Dr. DICKINSON, *2nd of April*, 1861.

21. *Transverse laceration of the jejunum, from a blow on the belly, with complete division of the bowel; no effusion of its contents into the peritoneal cavity.*

A boy, æt. 12, while playing in Hungerford Market about three o'clock P.M., of March 3rd, 1861, fell from a height of twenty-five feet to the ground, another lad, about eight years of age, falling at the same time from the same height upon his belly.

The lad was taken to King's College Hospital, at half-past six P.M., of the same day. He had dined two hours before the accident.

He complained of pain about the umbilicus; the urine was passed freely, and was healthy in appearance. There was no pain in the situation of the liver or kidneys.

He vomited everything he swallowed; the belly was not distended. Opiates failed to relieve the vomiting until the 6th of March; when five drops of liquor opii sed., given every three hours, checked the sickness until the morning of the 8th of March; meanwhile the bowels had not been moved. The vomited matter had the appearance but not the odour of stercoraceous matter; it was of a dark-yellow colour, and consisted of mucus and bile.

On and after the 8th of March, the lad became very uneasy and restless, his pulse was quick and weak, the face wore a pinched expression, and the lips and tongue were dry. His only support since admission had been small doses of brandy.

On the 9th, an enema of gruel and castor-oil acted freely, and brought away copious healthy fæces. The vomiting and prostration were, however, unrelieved, and the boy died on the 11th of March, at twenty minutes past three, P.M., eight days after the accident.

Post-mortem examination.—There was well-marked peritonitis. The great omentum slightly adhered by recently-effused lymph to two large coils of jejunum underneath it. The upper part of the jejunum was of a florid hue, and was so greatly distended with its fluid contents, that in size it resembled a moderately-filled large intestine. The adhesion of the great omentum was greatest towards the left lumbar region, where, during life, there had been well-marked dulness on percussion. On drawing upon this adhesion it gave way, and some of the contents of the bowel escaped.

Upon examination, it was found that the jejunum, about one foot and a-half from its commencement, was completely torn across transversely, as far as its peritoneal attachment, but that the orifice of each divided end was completely closed by the firm contraction of the circular fibres of the bowel acting like a sphincter, by the eversion of the mucous lining at the torn parts, and by the adhesion from effused lymph of the adjacent peritoneal surfaces.

Above the torn part, the bowel was largely distended; below it, the whole intestines (small and large) were remarkably contracted, and quite empty.

The preparation is in the Museum of King's College, London.

MR. PARTRIDGE, 2nd of April, 1861.

22. *Internal strangulation of the end of the small intestine (ileum), produced by its passage through an aperture in the mesentery of the appendix vermiformis.*

This preparation was presented to me, with the particulars of the case, by Dr. Frederick G. Julius, of Richmond.

A maid-servant, æt. 26, who had been in her situation five years, in the constant enjoyment of good health, complained on Saturday, the 2nd of March, 1861, of feeling ill, with a bad headach. She took a dose of aperient pills, which acted freely three times. During the following day (Sunday), she could not recollect whether anything passed from the bowels. On Monday, "she felt something give way in her inside;" she became suddenly violently sick, and threw up a large quantity of pure bile; notwithstanding this, she performed her ordinary work during the early part of Tuesday. On that day she took two pills of calomel and colocynth, with a saline aperient, all of which were vomited. Pulse 85. Tongue quite clean.

Wednesday—an enema of castor-oil and turpentine was administered, without effect. The vomiting was continual, and was unchecked by the various remedies employed. Pulse 95.

Thursday (March 7th), at ten A.M., she complained of pain at the umbilicus, augmented upon pressure; belly slightly tympanitic; tongue clean; pulse, 120. Great exhaustion. Vomiting invariably followed any attempt to take food. A long flexible stomach-tube was passed into the rectum, and three quarts of water were thrown up; it returned, however, unaccompanied by fæculent matter, thirty minutes past two P.M. The injection was repeated with no better effect, and she vomited fæcal matter for the first time. Pulse 150.

Six P.M. Constant fæculent vomiting—moribund. Thirty minutes past eight P.M. she died.

Post-mortem examination showed:—The small intestines greatly distended; the large bowel quite empty; slight traces of peritonitis. A knuckle of the ileum, immediately above its termination, was found strangulated and much congested, in consequence of having passed through and become impacted in a hole or interspace in the mesentery of the appendix vermiformis. The strangulated portion of the bowel was of a deep-red color, and some recent lymph was effused upon its peritoneal surface, as well as upon the surface of the adjacent parts.

The obstruction of the small intestine was complete.

The preparation is in the Anatomical Museum of King's College, London.
Mr. PARTRIDGE, 2nd of April, 1861.

23. *Internal strangulation of the small intestine, near the ileo-cæcal valve, by the pressure of a ring formed, apparently, by the union of two contiguous appendices epiploicæ, from the sigmoid flexure of the colon.*

The patient, a man, æt. 68, was admitted into St. George's Hospital, on the 7th of March, 1861, on account of vomiting and constipation. His history was as follows:—On the 27th of February, eight days before admission, while lifting some heavy iron-work, he strained himself, and immediately afterwards complained of severe aching pains in the loins and the belly. He passed a restless night from the pain; but the bowels acted next morning. On the 1st of March, he complained mainly of pain in the belly, accompanied by constipation, dragging at the umbilicus, and want of sleep, which continued up to the time of admission. Vomiting, of what was described as a dirty-yellow fluid, commenced on the 4th of March, and continued at intervals of about four or six hours, up to the time of his admission. He had taken very little nourishment during the week preceding admission, and everything had latterly been rejected. The treatment had consisted in the exhibition of aperients; and four enēmata of turpentine and salt had been administered, but were immediately returned. He had never before suffered from irregularity of the bowels, nor noticed any blood or slime in the motions. He had a double inguinal hernia, but both were quite reducible.

On admission, he was complaining of great dragging pain at the umbilicus, and in the lower part of the belly. His skin was cold and clammy, the eyes sunken, the face pinched and anxious, the surface of

a dusky blue colour, the tongue foul with brown fur, the pulse very small and weak, 84.

The abdomen was enormously distended, and was tympanitic all over, but especially in the course of the large intestine. There appeared to be some fulness in the left groin. The rectum was found to be empty, and a tube could not be passed more than a few inches beyond the anus; nothing was felt by the finger.

Under these circumstances, as the patient was in a state of extreme weakness, and as it was reported that injections had been immediately returned, it was thought right to cut down upon the descending colon at once. This was accordingly done, but the gut, which was easily exposed under the influence of chloroform, and drawn out by passing a ligature through its coats, was found collapsed and empty. A consultation was then held as to the propriety of cutting into the abdomen, from the front, in the right inguinal region; but this was judged too hazardous in the exhausted condition of the patient. He lingered for four days, suffering constantly from stercoraceous vomiting.

On *post-mortem examination*, the small intestines were found greatly distended, and very vascular. There was no effusion of any sort in the peritoneal cavity. At the lowest part of the small intestine, close upon the ileo-cæcal valve, a band crossed the gut, forming a ring completely around it and the commencement of its mesentery. On examination of this ring, it was found to spring from the sigmoid flexure of the colon, which was so drawn over into the right iliac region, as nearly to touch the cæcum; and the tissue forming the ring was loaded with fat, closely resembling the structure of the appendices epiploicæ. It was noticed, also, that the appendices epiploicæ were very long and broad, and some of them perforated at their base, so as to present the incipient condition of such a ring as had embraced the intestine. There could be little doubt, therefore, that this ring was either a single appendix perforated at its base, and dilated by the passage of the gut through it, or formed by the union of two neighbouring appendices; and as, in the former case, the gut would have passed through in the form of a knuckle, and not of a single coil, it was necessary to adopt the latter hypothesis. The gut, where it was bound down, was deeply marked by the stricture. It was greatly distended from the stomach to the seat of the obstruction; but this was more particularly the case, at the lower part, where about a foot of it was stretched so tight, that it gave way under the pressure of a stream of water, thrown in to wash out the intestines. It was nearly black from congestion. The constricting band was not adherent to the intestine; and after removal from the

body, the gut could be easily moved backwards and forwards in the ring. The position of the obstruction was immediately over the right common iliac artery. The stomach was much distended. The cæcum and ascending colon were about the natural size, and contained fæces; but the transverse colon and lower part of the gut were contracted and empty. A long transverse suppurating wound in the left loin led down on to the back of the descending colon, about three-quarters of an inch below the kidney, (the fat around the lower end of which, had been disturbed, and was consolidated), and the track of a needle into the gut at this point was easily made out, and the puncture opened with a blunt probe. Mr. T. HOLMES, *2nd of April, 1861.*

24. *Villous cancer (so-called) of the intestine.*

The patient, a woman, æt. 55 years of age, was under the care of Dr. Cross, of Spring Gardens, and of Mr. Skegg, of St. Martin's Lane. She had generally enjoyed a tolerable state of health, and was not subject to constipated bowels. She was first seen February 14th, 1861, when she stated that her bowels had not been relieved for a week. Various means were tried to relieve the constipation, and on the twentieth day a small quantity of figured motion passed, after the administration of an enema.

She never complained of violent pain in the abdomen, and suffered pain on pressure only when distended with flatus; this distention occurring only at intervals. The pulse ranged generally from 80 to 100, and no inflammatory symptoms were present. The peristaltic motion of the intestines could often be seen through the abdominal parietes, which were very thin. Death took place on the thirty-second day, and during this period Mr. Skegg believes that only about three ounces of fæcal matter passed per anum. No stercoraceous vomiting was present, and she had only occasional sickness of an ordinary kind. A pint of gruel was the largest quantity that could be introduced per anum.

I examined the lady, with the above-named gentleman, a short time after death. All the viscera, with the exception of the under-mentioned, were normal. The small intestines were distended with flatus to a moderate degree. The colon was more distended, especially its descending portion, but not to the extent generally seen in this form of intestinal obstruction. The peritoneum presented no appearance, in any part, of inflammation or congestion, and no fluid was seen in its cavity. At the junction of the colon with the rectum, the tube was

found puckered and contracted. This narrowing was occasioned by a pulpy, raspberry-like growth from the mucous membrane, which so diminished the calibre of the tube as to occasion the obstruction described. On microscopic examination, the excrescence was found to consist of elongated epithelial cells, placed one upon the other, and having much the appearance of the pro-ventricular glands of some species of birds. These elongations were very vascular, the vessels generally being distributed on their surface, but in many instances they appeared to terminate in tufts.

Remarks.—This case bears some resemblance to the one reported by Mr. Birkett, in the fourth volume of our “Transactions,” 1852-1853, p. 154. It is the only case of intestinal obstruction I have met with, in which all appearances of inflammatory action were absent. The introduction of a bougie in this case would probably have led sooner to a fatal result; and I have reason to believe, that in stricture of this part of the intestinal tube, life has not unfrequently been shortened by the introduction of bougies.

Dr. CRISP, *2nd of April*, 1861.

Report on the above specimen.—Our investigation of this new growth leaves no doubt in our minds of its villous character. We believe that the general appearances of the growth were faithfully represented in Dr. Crisp’s drawings, but we were not able to ascertain the arrangement of the capillaries in the free ends of the villi. We did not find any evidence in proof of the alleged cancerous nature of this adventitious growth.

MR. T. HOLMES,

MR. J. W. HULKE, *16th of April*, 1861.

25. *Poisoning by nitric acid.*

A gentleman of nervous and excitable temperament, æt. 38, was under the care of Mr. Skegg, of St. Martin’s Lane, for lung affection; he was seen with a vial at his mouth, and was prevented from taking all its contents, but he succeeded in swallowing about four drachms, by measure, of pure nitric acid (used for photographic purposes). The symptoms were burning pain in the region of the stomach; vomiting on the first day; shreds of mucous membrane from the mouth and œsophagus; the bowels confined, and relieved only by enemata; liquid food only taken, and that with difficulty; the voice not materially affected; and the intellect unimpaired. No urgent symptoms appeared until the fifth day after taking

the acid, when he lost blood by the mouth, became extremely restless, had convulsive movements, and gradually sank. The day before his death he appeared to be going on so well that his recovery was thought probable.

I examined the body, with Mr. Skegg, the day after death. The pleuræ were generally adherent, and tuberculous deposit was present in the upper parts of both lungs. The tongue and fauces were ash-coloured, with patches of denuded mucous membrane. A large portion of the œsophagus, from the fauces to the cardiac orifice, was in a sloughy condition. The mucous membrane, at the cardiac end of the stomach, was destroyed to the extent of about six square inches; this part being of a dark, blackish-brown colour. The lining membrane of the remaining part of the stomach was soft, swollen and ecchymosed, as shown by the drawing and wax model. The mucous membrane of the duodenum, and upper part of the jejunum, was also swollen and ecchymosed. The stomach and intestines contained a large quantity of chocolate-like bloody fluid. Spleen small. Other organs normal.

Remarks.—The most striking features in this case are, I think, the prolongation of life for five days, under such an extensive destruction and disorganization of mucous membrane, and the absence of urgent symptoms until a late period. In twenty-seven deaths by nitric acid, from Tartra, as reported by Taylor, in his *Medical Jurisprudence*, nineteen were rather rapid, and eight slow. Death generally occurred in twenty-four hours from the time of taking the poison. An infant died in a few minutes. One man, who was supposed to have taken two ounces of the acid, lived eight months, and a woman lived about the same time. Another female, aged 26, who, it is stated, took half-an-ounce of the acid, recovered. Dr. CRISP, 2nd of April, 1861.

26. *Congenital diaphragmatic hernia, allowing nearly all the small intestines, and two-thirds of the large, to pass into the right side of the thorax.*

F. S., a female child, was brought to me at the Children's Hospital, when six months old, in January, 1861.

The history given by the mother was, that it was born at the full period, apparently well-formed and healthy. The mother noticed that the chest was rather "high," by which she meant somewhat too much arched forwards. The doctor, however, said it was of no consequence.

From a week or two after birth she had a cough, and vomited phlegm with her milk. When she cried she changed colour, becoming blue. At the age of three months she was suddenly seized with violent screaming, became very livid, and clenched her hands, as if about to have a fit; this lasted two hours. A doctor was sent for, and ordered a warm bath. At this time there was a great difficulty of breathing. The cough henceforth was worse.

On the 27th November she was seen by a physician, who noted on her prescription paper, "Pleurisy.—Right side of chest quite dull. Heart reaches to outer side of nipple." After the attack above described, she never lay on her left side. On the 4th December it was noted that the right side of the chest was becoming resonant.

She was treated with iodide of potassium and the inunction of iodine ointment. When I saw her on 15th January, I was inclined to confirm the diagnosis of pleurisy. Her cough was of a harsh, metallic character, and sometimes attended with much pain. She takes no nourishment besides her mother's milk, which she not unfrequently vomits. The bowels act regularly.

On the 4th February, I made the following notes:—"The sternum is unusually arched forwards. During inspiration it is raised a good deal, the soft parts in the neck are drawn in, and there is recession of the abdomen near the diaphragm. The intercostal spaces are less apparent on the right than on the left side. Percussion at the right infra-clavicular region gives a rather tubular note, and, at the lower part of the chest, is quite dull. Respiration at the upper part is weak, and at the lower absent. The heart's beat cannot be heard nearer the middle line than half-an-inch outside the left nipple. Posteriorly, the right side of chest is dull; when lying on her face, there is a little resonance at the infra-spinous region; but when sitting up there is universal dulness. Respiration is very weak at upper part of right back; deficient in the middle, and absolutely wanting below."

The child went on, gradually getting worse, losing flesh and suffering more constantly from dyspnoea, which was subject to paroxysms of increase, occurring more and more frequently as time went on.

On the 19th March I noted:—"Not so well. Left side of chest dull, as well as right. Respiration almost absent on this side too. Dyspnoea very great."

She died on the 21st.

The next day I made a *post-mortem* examination.

On opening the thorax, I found a great coil of the large intestine in the right pleura, and on further examination, nearly all the small gut

DESCRIPTION OF PLATE VI.

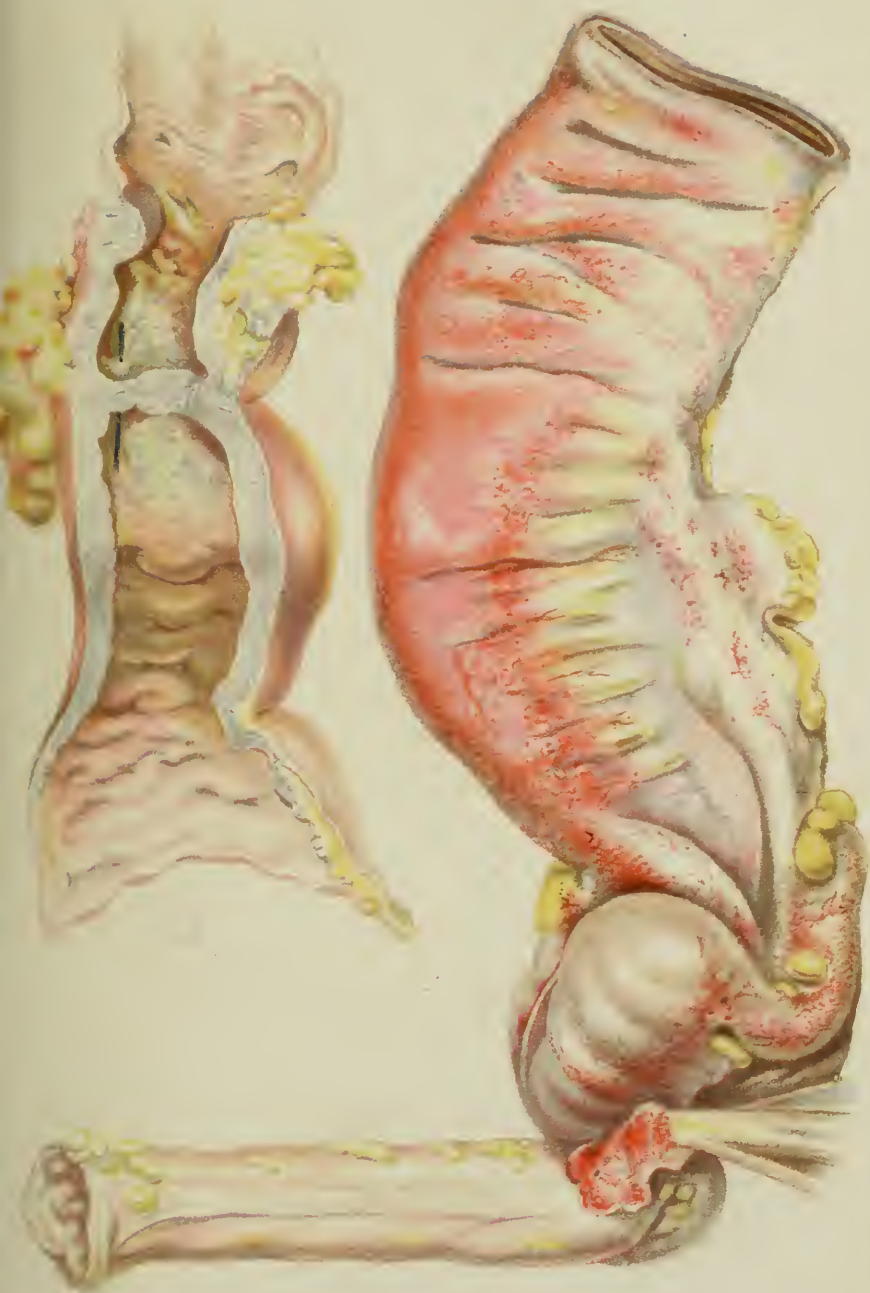
Illustrating Mr. Lawson's case of Scirrhus of the lower part of the Ileum and Cæcum, p. 119.

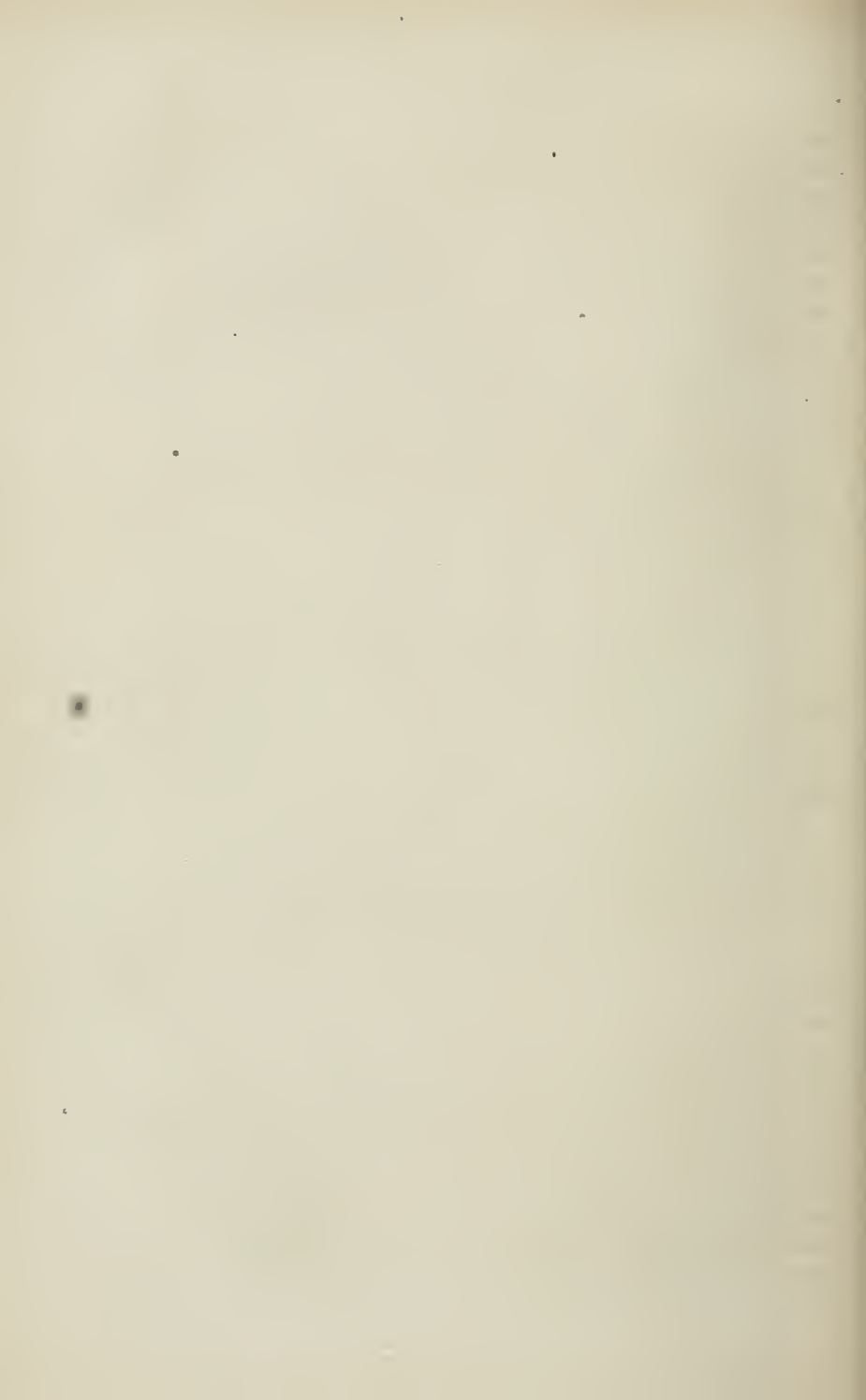
Fig. 1. Represents a portion of the ileum, cæcum, and colon, the latter contracted so as greatly to resemble the œsophagus.

- A. The colon, of a pale colour, contracted and empty.
- B. The cæcum.
- C. The appendix vermiformis.
- D. The ileum much distended and inflamed.

Fig. 2. Represents the same parts laid open by a cut along the mesenteric border. The walls of the lower part of the ileum and the cæcum are much thickened, and infiltrated with scirrhus material.

- E. A dense scirrhus ring, occupying the site of the ileo-cæcal valve, and entirely occluding the canal, with the exception of the new channel indicated by the probe.
- F. A probe passed through the ulcerated opening in the ileum into the appendix vermiformis and up into the cæcum.





in the same cavity. An aperture was discovered in the right wing of the diaphragm, through which the small intestine, from just below the diaphragm to the ileo-cæcal valve, and the large intestine, as far as the lower part of the descending colon, had passed out of the abdomen. The intestine was not at all strangulated, or congested. The pleura was not at all injected. The lower part of large gut in the thorax was slightly distended with gas and fæculent matter, and near the aperture in the diaphragm was somewhat contracted. The opening was nearly round, with a well-defined, sharp margin, mainly tendinous, measuring one inch by three-quarters of an inch in diameter. It was situated about one inch and a-half from the spine in the right ala of the diaphragm.

The *right lung* was collapsed throughout its entire extent, except about half of its upper lobe, which was emphysematous.

The left lung was partly collapsed, and elsewhere emphysematous.

Dr. T. HILLIER, *2nd of April*, 1861.

27. *Abdominal section for the relief of intestinal obstruction.*

The specimen consisted of a portion of the ileum, the cæcum, and a piece of the ascending colon (Plate VI.).

The parts were removed from the body of a woman, on whom I had performed abdominal section for the relief of an intestinal obstruction.

The history of the case was as follows:—

E. E., æt. 56, unmarried; has had three children, the youngest of whom is 20 years of age. By occupation a laundress. She always had good health until four weeks ago, when she was seized suddenly with vomiting and diarrhœa. Under medical treatment, the latter subsided; but the vomiting continued, and everything she took was immediately rejected. She had great thirst and severe abdominal pain.

On April 15th, she was admitted into the Infirmary of the Chelsea Workhouse, under the care of Mr. T. Dickinson. Her symptoms were then the following:—She complained of severe pain about the umbilicus, and over the abdomen generally; but pressure with the hand did not produce or increase the pain; the abdomen was tympanitic and distended; the countenance pinched and haggard, the tongue covered with a brown fur, and the pulse 116. She was ordered a brisk purge, and brandy, with beef-tea, was freely administered to her. The next morning the bowels acted three times, but the vomiting still continued.

Opiates were now given, but without affording any great relief. The vomiting became less frequent, but no action of the bowels again took place.

On April 22nd, six days since the last evacuation, she had regular stercoraceous vomiting, and this continued until April 24th, when, at Mr. T. Dickinson's request, I first saw her. She was then in the following condition:—She was vomiting stercoraceous matter almost continuously, with intervals never exceeding half-an-hour. The abdomen was of an enormous size, and through its walls the small intestine, greatly distended, could be distinguished by the transverse rugæ, which marked the whole abdomen, and their peristaltic action could be clearly made out by the undulatory movements of the transverse ridges. Handling the abdomen increased the peristaltic action of the bowels. The abdomen was slightly tender on pressure with the hand, but not so tender as is seen when peritonitis is established; it was sufficient to say that peritonitis was probably coming on, or the evidently distended state of the intestines might account for the slight increase of pain which manual pressure produced. She complained greatly of pain within the abdomen, although she could not distinctly localize it. Taking all the symptoms together, I fully concurred with Mr. T. Dickinson in regarding the case as one of mechanical obstruction, but whether it was produced by a band or by some other constricting agent, I could not say.

From being able to trace, through the integuments, the distended small intestine over the whole surface of the abdominal cavity, I came to the conclusion that the seat of the obstruction was either close to the termination of the small intestine or else somewhere in the colon. As medical treatment had proved of no avail, I suggested to the woman that she should allow a search to be made for the cause of the obstruction, at the same time explaining to her the necessary risk which such an operation entailed. She immediately acquiesced. Before operating, I had the advantage of the opinions of Dr. Buzzard and Mr. Henry Smith, both of whom agreed in the advisability of the operation, and in considering that it gave her a chance (although a slight one) of recovery.

Accordingly, with their assistance, and with that of Mr. T. Dickinson, I proceeded at once to operate.

The patient having been put under the influence of chloroform by Dr. Anstie, I opened the abdomen by an incision extending from just below the umbilicus to the pubes; then passing my hand into the right iliac fossa to examine the condition of the intestines in that locality, it

came upon a hardened mass of intestine. In order to make a visual examination, I prolonged the incision to about two inches above the umbilicus, and the parts in the right iliac fossa were then brought more clearly to view. It was then found that the small intestines, which were of a dusky-red colour from incipient peritonitis, continued enormously distended as far as the cæcum, but from that point no distended intestine was seen. At the junction of the ileum with the cæcum was a hardened mass, and the whole cæcum presented a peculiar thickened and altered condition both to the eye and the hand. The colon was not seen, as the small intestines were apparently in front of it, and having found the seat of the obstruction, a further search was deemed inadvisable. We each agreed that the obstruction was within the intestinal canal, and caused probably by some malignant deposit. I therefore immediately returned the intestines, and with sutures and harelip-pins closed the abdominal walls. The patient speedily rallied from the chloroform, but she died nine hours after the operation.

Post-mortem examination, twenty-four hours after death. On opening the abdomen, the small intestines, distended with fæces to about three times their original diameter, and measuring in circumference over five inches, occupied the whole of the front portion of the cavity of the abdomen.

Tracing them down to the cæcum, the distention was found suddenly to cease, and at this point was felt a hardened mass.

The cæcum was small, but much thickened, distended and coiled upon itself (Plate VI., Fig. 1). Passing from the cæcum was the colon, which lay behind the small intestines, perfectly flaccid, of a pale colour, and so contracted as to appear more like a portion of the œsophagus. The whole of the small intestines was of a dusky-red colour, showing that peritonitis had existed; but as yet there had been no effusion either of fibrine or of serum.

On making a section of the lower end of the ileum, cæcum and portion of the ascending colon, the following was seen:—At the site occupied in the normal condition by the ileo-cæcal valve was a dense scirrhus stricture (Fig. 2), which occluded entirely the intestinal tube at this point—not even water could pass. The walls of the cæcum were thick and hard, and infiltrated with scirrhus deposit. The appendix vermiformis, much elongated and distended, communicated with the ileum through an ulcerated opening, and also through its normal aperture with the cæcum, so that a small circuitous passage still remained, by which soft material might have passed, by travelling through the

new channel between the ileum and appendix vermiformis, and so on into the cæcum, but this route was blocked up with feculent matter.

Mr. GEO. LAWSON, 7th of May, 1861.

28. *Villous tumours of the rectum.*

Mr. Holmes exhibited two specimens of villous tumours springing from the mucous membrane of the rectum close upon the anus. The first was from the body of an elderly gentleman, a patient of Mr. H. C. Johnson, in whom some symptoms of the disease had existed for about four years before his death. The first indications of disease appear to have been some difficulty and pain in passing fæces, which were attributed by his medical attendants at that time to a fissure of the anus, for which he was treated, but the symptoms increased. When first seen by Mr. Johnson, a large soft tumour was easily felt, just within reach of the finger, springing from the anterior or upper wall of the gut close to the prostate gland and base of the bladder. It was very soft, bled easily, and was attached by a broad base to the gut. An attempt was made to enclose the base in a ligature, with a view to its removal; but this failed, since though the ligature could be carried round what appeared to be the whole base of the tumour, it was found impossible to get it to hold, the tumour being so soft and so sessile that the string slipped off at once. Under these circumstances, it became necessary to remove as much of the morbid structure as could be pulled away with forceps. This occasioned only a moderate amount of hæmorrhage. The base was freely cauterized with nitric acid. Much relief followed this operation, but the tumour grew again, although not very rapidly; and again the obstruction to the passage of the fæces caused him to apply for relief. This went on up to the time of his death, a period of more than two years, during which time he was operated on as above described no less than thirty-three times, the operation each time being attended with temporary benefit. The tumour, however, gradually extended at its base, and caused an increasing amount of obstruction. Under this constant recurrence of constipation, accompanied at last by very copious discharge from the tumour, his health gradually gave way; the belly becoming very tympanitic, and the emaciation extreme. He died very slowly.

The body was carefully examined after death, and no disease found except in the rectum. All the lower part of the intestine was greatly distended.

The preparation exhibited to the Society showed the rectum enormously distended. The tumour occupied more than half the entire

circumference of the gut, and was about four inches in one direction by three inches and a-half in the other at the base. It corresponded exactly to the prostate and the anterior part of the base of the bladder. The tumour consisted of long fringe-like processes, some of them nearly an inch in length, covered by villous membrane, and presenting an arborescent appearance when floated out in water. On microscopical examination, nothing was seen beyond the vessels forming the tuft and the fibrous tissue which supported them, except a large number of nuclear bodies, probably the elements from which the growing fibrous tissue was developed. No appearance was seen which at all resembled those usual in malignant tumours.

The other specimen was one which had been long in the Museum of St. George's Hospital, and showed a tumour about the size of a small apple, deeply lobulated, and with villous arrangement of the surface, precisely resembling that in the former tumour. It was, however, pedunculated, and therefore removable. All that was known about the specimen was that the patient was an elderly lady, a patient of Sir Benjamin Brodie, and that he removed the tumour—and, as it is believed, with success, and without return of the disease. On the latter point, however, there is no positive evidence. The specimen was exhibited merely as a companion to the former.

The case above related appears to be a good example of the (occasionally, at any rate) innocent nature of these villous tumours. That cancers occur, springing from mucous surfaces, which present a similar arrangement of surface need not be denied; and that of those tumours which are, in the pathological sense, innocent, many are from their situation and mode of growth incurable and fatal to life is quite certain; still, it is an important fact, in the treatment of such a case as that above related, to remember that such tumours are often innocent, and that they may be removed, when possible, with a fair prospect of success; and that even where this is not possible, they may be partially excised, or destroyed in any practicable manner, with relief to the immediate symptoms, and without fear of that increase in the growth and tendency to fungation, which would certainly be produced by meddling in a similar manner with a mass of soft cancer.

Mr. T. HOLMES, 21st of May, 1861.

29. *Malformation of duodenum in a child.*

F. H., female, æt. eighteen months, admitted into the Children's Hospital, Great Ormond Street, under the care of Dr. West.

Previous history, from registrar's notes.* Nothing remarkable in family history. Five brothers and sisters particularly healthy. Patient had no infantile complaint of any importance, and was in excellent health until three weeks ago. Mother first noticed that the child vomited frequently, rejecting everything she took; with frequent retching when she had taken no food. [It is to be regretted that there is no note of the nature of the child's ordinary food, nor of the time when it was weaned. The omission cannot now be supplied.] The vomiting continued until six days before admission. Along with this symptom there was considerable constipation. The child was fed from a spoon, swallowing easily. At first she was flushed, and afterwards became drowsy. The flushing was absent for the fortnight before admission, while the drowsiness increased, so that in the second week of her illness she usually lay as if asleep, quite quiet, and taking no notice of anything. This state alternated with "convulsions," of which she had above a dozen daily. While convulsed, she threw her arms and legs about, moaned, rolled her eyes about and ground her teeth. Each fit lasted about a quarter of an hour. In spite of her state of apparent unconsciousness, she swallowed always readily. During the week immediately preceding admission, appeared less unconscious, and became very restless, constantly wailing, frequently putting her two hands on the sides of her forehead as if in pain there, and sometimes crying out as if in greater pain. Got no sleep at night. During this week ceased to have "convulsions," or to roll her eyes, but still occasionally ground her teeth. Took food readily, and was very thirsty. [No categorical statement as to vomiting at this period.] For a week has had a constant discharge from her eyes. The night but one before admission "seemed mad" from her restlessness. A blister was applied to her nape, and a leech to the left side of her forehead.

On admission, her condition is thus described in the words of the registrar:—Child constantly whining, throwing her arms and legs about; at other times placing both hands on forehead, or pulling the toes of both feet. The last is a most frequent movement. Child, whilst lying in bed, assumes all manner of positions, sometimes on her back, at other times on her face, sometimes the legs are drawn up, at others rigidly straight. By these movements the child travels from one end of the bed to the other.

Fontanelle quite closed, no heat of head, no paralysis of limbs or

* Of these it may be mentioned, without imputation on their accuracy, that they were taken under a conviction, received at a very early period of the case, that the child was suffering from acute head-disease.

mouth. On the lower part of the cornea of each eye is an ulcer, largest and most advanced on the left, where it is the size of a split pea, greyish in colour and quite opaque. The conjunctivæ of both eyes are much injected, especially that of the left. The pupils rather small. The left upper eyelid droops a little. Light does not appear to cause any pain.

Treatment: Tinct. Iodini Co. to temples; Extr. Belladonnæ to eyebrows; Tinct. Opii, two minims, to be given every two hours until the child is quiet.

A later note of Feb. 15th reports: Child much quieter, evidently under influence of the opium. When roused, however, immediately resumes the movements before described. No vomiting. Bowels open once.

Feb. 18. Since admission, the child has been much quieter by the use of opium. When this is abstained from, the crying and appearance of pain are immediately resumed. The child opens her eyes much better than at time of admission.

Feb. 20. Child still takes opium every three hours. She appears much freer from pain. Opens her eyes readily, still puts her hands to her head, but does not cry out as formerly. Appetite good. Bowels regular.

These are all the observations that were made during life. The child died on the 25th February, and I saw her for the first time at the autopsy, forty-two hours after death. For what follows I am myself responsible.

Post-mortem examination.—Height seventy-four centimetres;* circumference of head forty-seven centimetres; from ear to ear, over head, twenty-four centimetres. Lips black. Abdomen and lower part of infra-mammary regions covered with minute ecchymoses, size of pin's-head. Mark of blister on neck. *Post-mortem* congestion of back not much marked. Emaciation moderate.

Head.—Scalp bloodless; under skin of forehead dark ecchymoses eight to ten millimetres in diameter. Fontanelle almost entirely closed. Nothing remarkable in arachnoid. Pia mater almost bloodless, serosity in its meshes. Grey-substance of convolutions rather pale, red points in centrum ovale of normal amount. About ten centimetres of fluid in each lateral ventricle. Velum interpositum of good consistence, fifth ventricle natural. Choroid plexus empty and pale. Soft commissure very large. Corpora striata and thalami optici quite healthy, but

* The measures of the mètrical system present so many conveniences, and such inestimable advantages as to accuracy, that no apology is necessary for their use here.

the grey substance of these ganglia is remarkably pale. On removing brain, a good deal of serum is seen in fossæ at base of skull. Dura mater of base, as well as that lining the calavaria, is particularly white and free from blood. Pia mater and convolutions of base of brain everywhere extremely pale. No exudation in fissures of Sylvius, or over interpeduncular space. Dark loose clots in cut extremities of vertebral arteries; none in extremities of internal carotids. Corpora quadrigemina and mammillaria healthy. No disease found on carefully slicing remainder of cerebrum. Foliations of cerebellum and grey matter of pons and medulla oblongata extremely pale, but otherwise these parts are healthy.

Thorax.—Thymus gland measures forty millimetres in length by nineteen millimetres in breadth, and is only two to three millimetres in thickness.—In pericardium about eight to ten centimetres of fluid. Both auricles full of dark clot. Very scanty dirty-brown clot in both ventricles; serum of blood singularly brownish. Heart-substance pale and of a peculiar brown colour; maximum thickness of left ventricle eight millimetres. Orifice of pulmonary artery measures (at base of semilunar valves) forty millimetres. Tricuspid orifice fifty-nine millimetres; aortic thirty-seven millimetres; mitral forty-nine millimetres.—No fluid or adhesion in either pleura. Left lung a little collapsed at lowest border, elsewhere perfectly healthy. Bronchi contain a very little brownish mucus; their lining membrane not injected. Right lung, slight lobular collapse on posterior surface near the lowest border. Scanty, firm adhesions between lobes of this lung. Bronchi as in fellow lung. No deposit or any other disease in either lung. Their tissue is remarkably pale, and of a dirty-brown colour.

Throat.—No exudation or swelling of uvula or tonsils. The glottis freely open. A little injection at back of larynx above chordæ vocales. Inside of larynx and trachea quite healthy.

Abdomen.—Liver large, extending into left hypochondriac region. A very little loosely-clotted brownish blood escapes from the portal vein. Capsule strips off readily; substance pale. Centres of the lobules slightly injected. Much serous fluid oozes from the cut surface of the liver, and a quantity of fluid blood from the sections of the hepatic and portal veins.—Spleen dark slate colour; on section almost black. Malpighian bodies of same colour as matrix.—Pancreas healthy.—Kidneys, capsules peel off readily. Cortical and medullary portions of almost uniform hue, dark yellowish-brown. The right organ is a little paler than the left. Their tissue is soft, but apparently healthy.—Supra-renal bodies natural.—Intestines contain only a small quantity of yellow semi-

fluid matter, chiefly in the ileum. Peyer's patches well marked, injected at upper part of ileum. Several of them in this situation unduly enlarged. About a couple of metres above the ileo-cæcal valve one of these patches is much injected and minutely ulcerated. The solitary glands in the neighbourhood of this patch are in the same condition. Between this spot and the ileo-cæcal valve some of the agminated glands are healthy; some are large, injected, and here and there ulcerated. On the upper surface of the ileo-cæcal valve, there is a pale, irregular ulcer, about the size of a pea, with edges adherent to the base of the ulcer, except in one or two spots. Solitary glands of the large intestine extremely well-marked throughout; each surrounded by a ring of grey colour.

Stomach and duodenum.—Stomach contains a little brown fluid food mixed with mucus. The organ was slit up along the lesser curvature, through the pylorus and to the end of the duodenum before the peculiarities of the parts were observed. The stomach was then seen to present a constriction, beyond which was a second pouch, looking on first examination exactly like the stomach. The second pouch ended sharply at a spot where there was a fold of mucous membrane, and beyond this spot followed intestine of ordinary character stained yellow with bile. There was no inflammatory injection about these parts. The stomach was thickly coated with brown grey mucus, the second pouch similarly coated, but with less of it. Perfectly normal rugæ, longitudinal and transverse, but mainly longitudinal, seen on stomach. In second pouch perfectly normal rugæ, exactly (at first sight) like those of the stomach, and like them obliterated on stretching. The rugæ here, however, were mainly transverse. The preparation having been set aside in spirit, and the coat of mucus detached from its surface, was now examined more carefully, and the nature of the second pouch is conclusively set at rest by the discovery of villi on its mucous membrane. These begin at the constriction, which is therefore truly the pylorus. What appeared to be a fold of mucous membrane at the bottom of the second pouch, proves to be a septum stretched (transversely with a slight obliquity) across the calibre of the bowel. This septum has been slit to near its centre by the scissors which opened the parts. The only real aperture that exists in the septum, however, is a small hole 2·5 millimetres in diameter, pretty nearly circular in form. It is almost exactly in the middle of the septum, being in every direction about twenty millimetres from the attached border thereof. The edges of the hole are smooth and unbroken, and not thicker than other portions of the septum. A probe inserted into the bile-duct on

the outside of the intestine passes between the two surfaces of the septum and appears at the central hole.

The following are the measurements of the parts in centimetres :—

Stomach :—

Along lesser curvature from cardia to pylorus	..	10
„ greater „ „	..	19
Length from fundus to pylorus	.. ..	12·5
Circumference (maximum) just below fundus	..	9·5
„ (internal) of pylorus	..	3·8
Fundus projects below line of œsophagus	.. ..	3

Duodenal pouch :—

Along line of the lesser curvature, from pylorus to septum	8
„ greater „ „ „	10·5
Length in a straight line „ „	7·5
Circumference (maximum) in middle of length	8
„ at septum	6

Bowel beyond septum :—

Portion stained with bile, beyond septum, removed with stomach	.. .. .	12
Circumference	.. .. .	5

The tissues of these parts were next investigated. In the peritoneal coat there was nothing remarkable, except that a good portion of the circumference of the duodenal pouch was invested by it. The muscular fibres were above their normal thickness in the stomach; the circular fibres appearing to be those which have undergone chief increase. This coat is thickest for about five centimetres above the pylorus, where its section measures from 1·3 to 2·0 millimetres. It is thinnest about the fundus, where it is no more than 0·4 millimetres in thickness. The mucous coat of the stomach has quite its ordinary characters. Near the pylorus the minute glandular appearance in its structure can be well made out with a strong light by the naked eye; these are probably follicles. Coarser granular aspect among rugæ in the lower part of greater curvature also very well marked. No approach to villi seen on stomach above the pylorus. Mucous membrane thinnest near œsophagus, measuring ·25 millimetres; thickest near pylorus, measures ·75 millimetres. At the pylorus, the muscular coat projects inwards, so that the thinner muscular tube of the duodenum is attached to the outside (and not to the end) of the muscular coat of the stomach. In the duodenal pouch the muscular fibres are very thick for intestine, and contrast much with the same fibres below the septum. In the pouch they measure everywhere about ·5 to ·75 millimetres. The increased thickness

appearing to be due pretty equally to the longitudinal and circular fibres. The mucous membrane (as before said), is here covered with villi, which commence immediately at the pylorus. The rugæ into which it is thrown may perhaps be only broad and low valvulæ conniventes, but at any rate they are quite removed by stretching the bowel. In thickness, the mucous coat is remarkable, as nearly as can be measured being $\cdot 4$ or $\cdot 5$ millimetres. On dissecting from the outside, Brunner's glands are easily recognised. At the septum the circular muscular fibres form a stout band, one millimetre in thickness, that encircles the intestine, and extends by a few fibres* into the mucous fold of which the septum consists. This fold has all the ordinary characters of intestinal mucous membrane, having villi on both its upper and its lower surface. Held up to the light, two darker streaks are seen to traverse the septum from its circumference to the central hole. The chief of these is the bile-duct already mentioned. This canal ends at the hole by an oblique opening, so that a probe passed along it almost invariably enters the calibre of the intestine *below* the septum. The other streak looks like a minute vessel, but it opens into the cavity of the intestine on the upper surface of the septum. It is everywhere distinct from the bile-duct. Its opening is by a groove or furrow (two millimetres long) in the mucous membrane. A bristle can with much ease be introduced along this groove into the minute canal for the distance of a centimetre and a-half, nearly to the attached edge of the septum, but it cannot be got further. A fine tube similarly introduced can be used to inflate the canal, but air does not seem to pass farther than the bristle did. The intestine below the septum is of great tenuity, contrasting strongly in this respect as well as in size with the portion above. Its muscular coat is very thin, but both sets of fibres can be seen in it. Its mucous lining has the ordinary villous structure with average sized valvulæ conniventes. Below the septum, Brunner's glands are very small and difficult to find.

Remarks.—The nature of the *post-mortem* appearances in the various organs leaves room for no doubt that the cause of death was starvation, resulting from the malformation in the duodenum. With this view the symptoms during life, so far as they were noted, present a fair degree of accord. For the solution of the most interesting questions that are suggested by the malformation, there exist, however, few or no data. How the child's life and nutrition were sustained for so long a period, and how it was that vomiting having once set in ceased a fort-

* The same are seen scantily for a greater distance, by the aid of the microscope.

night before death, so that attention was not specially attracted to the state of the digestive organs—these are questions that can only be answered by probabilities. It is likely that while the child was at the breast, the scanty residuum of its food found no difficulty in passing the orifice of the duodenal septum. And any inconvenience was probably postponed during the time that the child, after weaning, was fed on a milk diet. Vomiting may be believed to have begun when more solid food—perhaps of an indigestible kind—was presented to the stomach. And conversely, a return to spoon-food, when the child was considered an invalid, may have been the reason of the cessation of the vomiting.

The absence of all record of the nature of the food renders it useless to pursue further any physiological speculations as to the process of digestion carried on under the anomalous conditions here observed.

What was the nature of the malformation homologically considered? Was the duodenal septum only an overgrown *valvula connivens*, or can it find a parallel in any special structure normally present in this situation? The latter view is suggested by the position of the bile-duct in the septum. A little elevation of the mucous membrane at the entrance of this duct can usually be found in man, and it is more developed in most of the lower animals; but this elevation is longitudinal. Several anatomists describe a slight transverse ridge between the entrance of the biliary and pancreatic ducts; and it is conceivable that the peculiar septum of this case was an exaggeration of such a ridge. In this child the connections of the bile-duct were with the lower aspect of the septum; the canal described on the upper surface was probably the pancreatic duct.* Still, I can learn of no animal in which any ridge exists at all approximating to a septum, and Professor Spooner has been kind enough to inform me that he has never met with any similar fold of membrane in all his varied dissections among the lower animals.—A special dilatation of the duodenum, just below the pylorus, independent of any septum, is stated to be the normal condition in certain monkeys and in the beaver; but in the case of this child the dilatation is so obviously a condition supplementing the obstruction, that analogies from these animals must be drawn with much qualification.—The supposition that the septum in question was an overgrown valve of Kerking derives some

* Although in most of the lower animals the pancreatic duct is the lower of the two which enter separately into the duodenum, yet this does not appear to be without exception. In the hedgehog, for instance, according to Blasius, the pancreatic duct enters above the bile-duct. And in the interior of this duct of *Wissung*, this observer found his probe stopped by what appeared to be a valve.

support from the instance to be presently quoted from Baillie, where the jejunum was the seat of a similar malformation to a less degree. On the other hand, the occurrence of muscular fibres in the cellular tissue, between the mucous coats of the septum, is adverse to this view.

The authors whom I have consulted on the subject of malformations, (St. Hilaire, Meckel, Vogel, Andral, Hartman, Dubois, Cruveilhier, and Rokitansky, among others), afford me no information of any analogous case.

Hodgkin (pp. 364 and 366) speaks of some cases being on record where the duodenum was dilated so as to form a sort of supplementary stomach, but no instance had fallen under his own observation. Baillie (in the second volume of his collected works, p. 175) relates the following: "I have seen one of the *valvulae conniventes* much larger than usual, and passing round the inside of the jejunum like a broad ring. The canal of the gut was necessarily much narrowed at this ring, but no mischief had arisen from it. The malformation, however, might have laid the foundation of fatal mischief. Some substance too large to pass might have rested on the ring, and there produced inflammation, ulceration, and ultimately death."

Dr. GEORGE BUCHANAN, *21st of May*, 1861.

II. LIVER AND PANCREAS.

30. *Large gall-stone ejected by vomiting.*

A lady, *æt.* 94, under the care of Mr. Jeaffreson, of Framlingham, Suffolk, was seized with great pain in the stomach and severe vomiting. After nearly two days' illness, she ejected from the stomach a hard, dark, oval mass, rather larger than a full-sized nutmeg. After this she was relieved, and soon recovered; and she has enjoyed good health ever since the occurrence, which took place six months ago. The mass is sent up for examination.

Mr. HENRY THOMPSON, for

Mr. G. E. JEAFFRESON, *6th of November*, 1860.

Report on the above specimen.—The calculus measured about an inch in length and half-an-inch in diameter. It weighed nearly sixty-five grains, had a smooth, dark-coloured exterior, and a crystalline fracture. On chemical analysis it yielded above ninety per cent. of cholestearine, and nearly six per cent. of colouring-matter and mucus.

From its composition, I think there can be little doubt that it is a

biliary calculus, which has found its way into the stomach, and been from thence expelled by vomiting.

Dr. HARLEY, 4th of December, 1860.

31. *Two specimens of accessory pancreas.*

These are two tumours of exactly the same nature. One was found by myself, last week, in the body of a man, æt. 42, who died at St. Thomas's Hospital. It was seen shining through the peritoneal covering of a bit of the upper part of the jejunum, presenting a distinctly lobulated surface, and occupying a circular space of about one inch in diameter. On section it proved to be of a dense texture, and through its entire thickness, which was about one-third of an inch, it was of a lobulated structure, looking precisely like a piece of pancreas. The pancreas of the same subject was, in fact, subsequently compared with it, and showed to the naked eye no other difference than a larger size, and a somewhat coarser lobulation. It was afterwards proved by the microscope that this similarity extended also to the minute structure of the parts.

In the tumour, as well as in the pancreas, there were found groups consisting of a great number of parallel, elongated and roundish follicles. These were separated from each other by elastic fibres, which were more numerous in the tumour than in the pancreas; and this would probably account for the greater density of the former. Besides, there were seen a number of little, bright, spheroidal bodies, about double the size of blood corpuscles, and each of them containing a still brighter spot in its centre. These were much more numerous in the pancreas itself, than in the tumour, and were probably derived from ducts. But I could not discover in the tumour any duct, or any fragment of one.

In some parts of the microscopical preparations of the tumour, there were also seen, distributed at equal distances from each other, a number of yellowish, shining, perfectly spheroidal fat-cells, of about double the size of the other white and bright corpuscles, and corresponding precisely to similar appearances in preparations taken from the pancreas.

This is as much as I have been able, thus far, to make out in reference to the identity between the tumour and the pancreas, and, I believe, it is enough to leave no doubt that both are of one and the same nature.

The other tumour is, in respect of its site, still more remarkable. It

was found by Dr. Bristowe, nine years ago, in the body of a man æt. 40. Dr. Bristowe wrote at the time in the *Post-mortem* Book the following brief account of it:—

“In the middle of the ileum a tumour was found seated in its walls. It occupied a circular area with a diameter of about three-quarters of an inch, and a thickness of about one-third of an inch. It was somewhat lobulated on the surface, and on section presented precisely the character of the pancreas, or salivary glands.

On microscopical examination it was found to consist of small roundish and elongated follicles lined by columnar epithelium.”

There can be no doubt that this tumour and the former are of the same nature, and it is interesting that they should have been found in such different parts of the intestines.

If they had been situated in the duodenum one would have perhaps thought that they were hypertrophied Brunner's glands, but as there are no glands of similar structure in the parts of the bowels where they were actually found, there remains little else than to take them for specimens of accessory pancreas.

Dr. EDMUND MONTGOMERY, 5th of February, 1861.

V.—DISEASES, ETC., OF THE GENITO-URINARY ORGANS.

SUB-SECTION I.—KIDNEYS, BLADDER, CALCULI, ETC.

1. *Crystals of diabetic sugar.*

In May, 1858, I exhibited before the Society some tears shed by a lady who had diabetes, for the purpose of showing that they as well as the other fluids of the body contained sugar. The quantity obtained was too small to estimate the specific gravity. That of the urine of the same patient was 1043, and to make a comparison between the two fluids, a drop of each was evaporated on a glass slide. That from the tears showed a much thicker and more opaque crust than that from the urine, leading to the inference, that the specific gravity of the urine was less than that of the tears.* This simple experiment led to the discovery of the characteristic crystals of diabetic sugar, for when the glass slide was examined some weeks afterwards, it was found to be minutely speckled here and there; the result of saccharine crystallization, as the microscope subsequently demonstrated. The crystals were of a rhomboidal form, chiefly in large prisms, many in tufts, whilst others

* See Vol. IX. of “Transactions of Pathological Society,” p. 447.

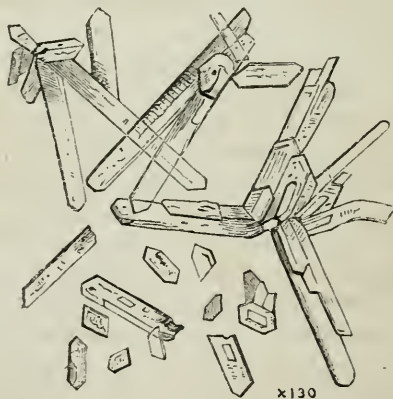
resembled a number of branches springing from a parent stem in the form of shrubs. These are figured in the 1st Vol. of Dr. Beale's *Archives of Medicine*, and also in Dr. Beale's Lectures on the Urine, published in the *British Medical Journal* for 1860, p. 374, Fig. 6.

These beautiful crystals may be obtained by simply evaporating some drops of diabetic urine, containing a mere trace of urea and salts, on a glass slide. But they cannot be procured from all specimens of urine, particularly if many of its salts are present. When that is the case, the evaporated urine will present, to the naked eye, a number of distinct little white specks of the sugar crystallized, which, under the microscope with a low power, are in the form of circular masses of sugar formed by the aggregation of flat plates, and the entire surface is covered with small dog-toothed crystals projecting outwardly. If examined on a dark ground, they resemble circular masses of yellow barley-sugar.

When the saccharine fluid on the other hand is very pure, the evaporated drop appears in a few days to be wholly crystalline, and it is in this way that the arborescent form of crystallization is assumed. Here and there are detached masses of the crystals assuming the form of rhomboidal prisms. I have not examined any of them with the polariscope, but Dr. Beale describes them as very beautiful objects by polarised light.

The specimens of diabetic crystals, exhibited on the present occasion, illustrate the two forms described, namely, those from nearly pure saccharine urine, and those from saccharine urine containing perhaps more of the salts than usual, chiefly urea. The specific gravity of the first

WOODCUT 10.



was 1044, and of the second 1035—the latter passed by a male patient,

under Dr. Farre's care at St. Bartholomew's Hospital, whose disease was of two years' duration, and who is now in the third stage of phthisis. The purer urine again, with the beautiful crystalline forms, is from a young female subject to diabetes for twelve months; the drawing represents the general appearance which the crystallization assumes in it.

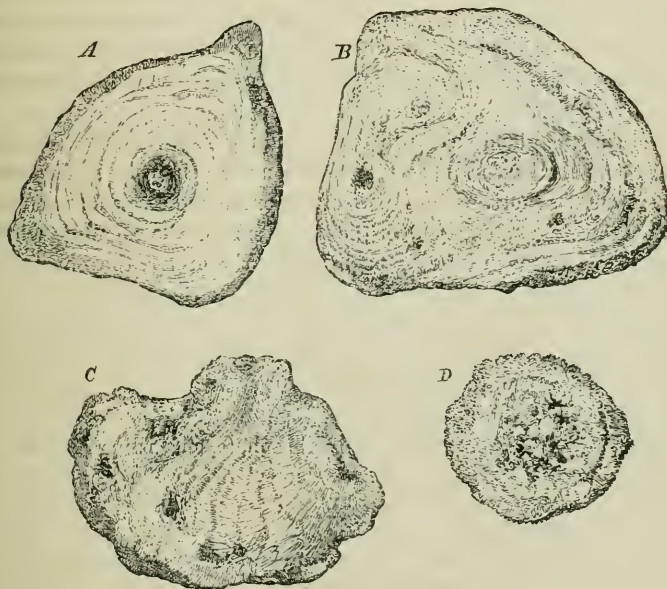
It is possible that saccharine crystals of a diabetic nature may not be new, at any rate they were neither figured nor described before I drew attention to them in the *Archives of Medicine*.

Dr. GIBB, 15th of January, 1861.

2. Urinary calculi from the urethra, prostate, and bladder.

Four stones, chiefly phosphatic. Weight four ounces, two drachms. One (Fig. A., Woodcut 11) about an inch in diameter from bulb of

WOODCUT 11.



Represents the calculi of the natural size.

urethra; another (Fig. B) almost an inch and a-half in diameter, from a pouch formed probably in membranous part of urethra; a third (Fig. C) almost an inch in diameter from the same pouch immediately

behind; and a fourth (Fig. D), about three-quarters of an inch in diameter, from the bladder. Removed by operation from a patient, æt. 71, who had been the subject of stricture for fifty years.

The patient made a satisfactory and rapid recovery.

Mr. FERGUSSON, 18th of December, 1860.

3. *A kidney showing a calculus in its pelvis, and the effects.*

This specimen was exhibited to illustrate the insidious progress of renal calculus, and as affording a good example of the effects produced by the presence of a foreign body in the pelvis of the kidney.

The woman, from whom the kidney had been removed, had not suffered severely for longer than the last six months of her life; though from the previous history, the calculus must have been forming during the preceding two years and six months. She died at last partly from the exhausting effects upon her powers of endurance and repair, and partly from uræmic poison.

On examining the kidney after death, it was found that, on the proximate side of the calculus which occupied the pelvis of the kidney and branched into the infundibula, the calyces were so extensively and destructively dilated, that their lining membrane was destroyed in patches, and the gland structure of the kidney itself, under the same pressure and noxious influences, had become extensively spoiled and degenerated. In short, not any part of the organ had escaped the effects of the obstructive calculus. On the distal side of the calculus, which had projected a branch into the beginning of the ureter, the effect produced was contraction of the ureter. External to the pelvis, the hilum of the kidney was filled up with a mass of organized inflammatory deposit, which so encroached upon the cavity of the pelvis, that the calculus appeared embedded in the mass.

The woman was thirty-three years of age.

The calculus was composed of triple phosphate, encrusting crystals of oxalate of lime.

Mr. J. CROFT, 15th of January, 1861.

4. *Uric acid calculi.*

The specimens consisted of a great number of calculi, varying in size from less than that of a mustard-seed to that of a pea, and weighed in the aggregate seventy-five grains. They were remarkable for almost perfect roundness and smoothness, and were either of a yellowish or pinkish-grey colour. Analysis proved them to consist of uric acid.

The calculi were brought to Dr. Leared by a man, seventy years of age, who consulted him for bronchitis. The patient stated that they, with many others, were suddenly discharged from the urethra during a fit of coughing, and that on a previous occasion a similar discharge had occurred, but that he experienced no symptoms referrible to the bladder.

Dr. LEARED, *5th of February, 1861.*

5. *Misplacement of right kidney, probably consequent upon peri-nephritis occurring at a very early period of life.*

The kidneys exhibited were taken from the body of a man, *æt.* 50, who died from pulmonary disease.

The right kidney was small, weighing two ounces and a-half only. It was situated altogether above the level of the last rib, and was entirely surrounded, and firmly connected to the diaphragm, by dense fibrous tissue. The ureter was double, and involved (especially the upper part) in tissue similar to that surrounding the kidney. There was no distinct hilum. The blood-vessels and ureter entered, or passed out from, the lower and anterior part of the organ. On section the secreting structure appeared healthy; but all the pyramids of Malpighi seemed fused into one large one, the tubuli of which curved from the upper outer and back part of the organ downwards and forwards.

The other kidney was nearly double the usual size, healthy in structure, and in its normal position.

The chief points of interest in connection with this case are, that the misplacement must have been the consequence of inflammatory disease in the cellular tissue surrounding the kidney (or peri-nephritis), and that this disease must have occurred at a very early period of life, if not during intra-uterine life. The marked alteration, not only in the form and position of the kidney, but in the arrangement of the tubuli, the degree of organization attained by the surrounding tissue, and the remarkably increased development of the other kidney, indicate the early period at which the disease must have occurred; while the positive denial by the patient's friends of all knowledge of any such disease as could give rise to such a result suggests the idea that it occurred before birth.

Mr. DURHAM, *19th of February, 1861.*

6. *Chronic calculous pyelitis, with dilatation of the calyces of the kidneys.*

The specimens consisted of two kidneys removed from the body of a

female, æt. 57, who had suffered (according to the history of the case given to Dr. Hare by Mr. Francis Clarke, under whose care she had chiefly been), for about fifteen years, from symptoms referrible to the kidneys, having had much pain in the renal regions, especially the left one, with occasional nausea and vomiting, and having sometimes passed considerable quantities of bloody urine. About eight years ago her sufferings were much and suddenly aggravated, and have continued with little intermission since that time. The least exertion greatly increased them. She could not lie long together on the left side, and when she turned over in bed, she felt something, as she described it, rolling perceptibly from side to side. Notwithstanding her sufferings, she remained stout up to the period of her death, which was preceded, for about a week, by purging, a much diminished secretion of urine, by constant sickness, by loss of sight, and coma. She had been seen by Dr. Prout a short time prior to his death.

The two kidneys presented essentially the same characters, though the morbid alterations had progressed somewhat more in the left than in the right one. The entire bulk of each organ was considerably greater than natural, but the left kidney was the larger one. The increase of size was partly due to a considerable deposit of fat in the pelves of the kidneys, but chiefly to the fact of the great dilatation which the infundibula and calyces had undergone, so that the latter, when distended with fluid, formed considerable prominences (with very thin parietes) on the surface of the organs, thus giving the whole of each kidney a largely nodulated appearance. In the cavities thus formed, variously-sized calculi were found; many were very small (mustard- or hempseed size), while two or three were about the size and shape of cherry-stones, and one or two in each kidney were of an irregularly-triangular form, presenting very pointed angles or horns, which might very readily, by irritating or wounding the kidney, produce hæmorrhage. The form of these larger calculi was evidently moulded by the different cavities (the enlarged calyces, &c.) into which their more prominent portions projected. The calculi consisted of lithic acid and lithate of ammonia, and the larger ones had a coating of phosphates; one of these larger, irregularly-triangular ones measured nearly one inch and a-half in its longest diameter.

Dr. HARE, 5th of March, 1861.

7. *Encysted calculus; removed by operation, with a portion of the cyst; successful result.*

D. S., a baker, æt. 32, was admitted into the Norfolk and Norwich

Hospital, under the care of Mr. Cadge, January, 1861, with symptoms of stone in the bladder.

He was cut for stone, twenty months ago, by Mr. Crosse, and a small cup-shaped calculus was removed. It had clearly formed over some projection; and, when the finger was in the bladder, an enlargement, corresponding in size and shape to the last joint of one's finger, was felt, not far from the neck of the bladder. For the moment it was thought to be one of those fibrous growths which are occasionally met with attached to the vesical surface of the prostate gland.

He made a rapid recovery, left the Hospital in three weeks, and remained perfectly well for more than a year.

Symptoms of stone, however, returned, and on January 25th, 1861, I cut him, by the median method. When the finger entered the bladder, it came at once upon the enlargement before noticed; and now that I could more fully examine it, I felt sure that it did not belong to the prostate at all. It was too far away from the urethral orifice towards the rectum, and felt like a stone covered by mucous membrane, as it turned out to be.

A fair sized stone was felt loose in the bladder.

I resolved to remove this first, and then try to deal with the encysted one. The forceps, however, grasped the latter, and after one or two slips it was gradually and slowly removed. A small portion of the mucous membrane which covered it, and was included between it and the blades of the forceps, came away with it. The calculus was pear-shaped, and had a nipple-like process at the larger end, which protruded through the opening of the cyst into the cavity of the bladder. The portion of cyst which was removed corresponded to, and fitted round, the neck of the nipple-like process, and covered besides perhaps a fourth of the stone. The other stone was then removed, it was oval and somewhat hollowed on one side, but not so much cup-shaped as that which was withdrawn on the former occasion.

The operation did not occupy many minutes, and there was but little bleeding. A tube was introduced with the view of diminishing the risk of extravasation of urine, which, considering the injury done to the lining of the bladder, must have been considerable.

In thirty-six hours the tube was removed, and he began at once to pass the urine wholly by the urethra, complained of little or no pain, and made a teacupful of water at a time about every three or four hours.

In a few days he was walking about the ward, and on the day-week following the operation, I allowed him to come into the theatre to witness three more operations for stone.

(At the time there were eight cases of stone in the Hospital.)

It may be thought that the removal of an encysted stone, by tearing away a portion of the cyst, was a rough proceeding; but I am satisfied that as little injury as possible was done, probably much less than if I had resorted to a knife to enlarge the opening of the cyst, or any other method. The forceps I am in the habit of using have the inside of the blades lined with linen, which gives a smooth, muffled feel to any stone when it is grasped, and this accounts for my being unaware that it was the encysted one which I first caught.

In all the cases of encysted calculus that I have examined (and they have been numerous) the stone in its cyst has been found, if I may so say, on the outside of the muscular coat of the bladder communicating with the interior by a narrow opening. In this instance it lay, I believe, on the inside of the muscular wall, was covered by little more than the mucous membrane, and enlarged into the cavity of the organ. This constitutes the singular feature of the case, and accounts also for the ease with which the stone was removed.

On looking at the calculi again, I am not sure that the one which was extracted at the first operation was not a portion of the encysted stone, and was broken off the nipple-like process by the forceps.

MR. HENRY THOMPSON, for Mr. CADGE, 5th of March, 1861.

8. *Calculus impacted in a sac at the base of the bladder.*

J. T., æt. 69, was the subject of stricture for many years, from which he suffered much and had much treatment. Of late he had contrived to keep himself in comparative comfort by passing a catheter for himself, and emptying the bladder two or three times a week, as he had been unable to get rid of all the urine from the bladder by natural efforts. Since this, his symptoms had not been very severe, but continuous. There had been no signs of stone; his urine had been cloudy; some pus and mucus present, and he never recollects to have passed gravel.

He died of pneumonia and bronchitis.

Post-mortem examination.—On examining the bladder and prostate, the latter was found to be somewhat enlarged, but not greatly. About an inch behind it, on the floor of the bladder, was a small circular opening, capable of admitting about a No. 9 bougie, which was the orifice of a sac, lined with mucous membrane, and the size of a filbert. In it lay a small calculus, oval in form, the size of a horsebean, apparently of uric acid. Several other small sacs were seen about the base and sides of

the bladder ; but no other contained any calculus. The mucous membrane of the bladder showed marks of chronic inflammation. In the urethra the stricture was seen, situated in the bulbous portion.

The peculiarity of this specimen is the situation of the sac. Such diverticula of the mucous membrane are more commonly found at the sides and summit of the bladder, rarely at the base. One such example, however, has been exhibited before at this Society, by Mr. Shaw (*see* Vol. V., p. 199). In that case, however, no calculus existed.

Mr. HENRY THOMPSON, 19th of March, 1861.

9. *Numerous prostatic calculi.*

These were removed from a man, *æt.* 89, who died recently. He had been the subject of hemiplegia for thirteen years ; and during the last few months of his life had been bedridden, and had passed urine and *fæces* involuntarily.

At the *post-mortem examination*, the right hemisphere of the brain was found to be softened throughout, and traces of an old blood-clot were found in the corpus striatum. The arteries at the base of the brain were much thickened and indurated with calcified deposit in their coats. There was a small phosphatic calculus in the right kidney ; the left had numerous small cysts in its substance. The bladder was thickened and fasciculated, and the prostate somewhat enlarged. Occupying a cavity in each lateral lobe, and also immediately beneath the verumontanum, were numerous dark-coloured calculi, very hard in texture, with polished surface, each having several irregular facets, varying from the size of a grain of pearl barley to that of a pea. These characters distinguish them completely from calculi of renal or of vesical origin ; and they may be contrasted advantageously, for this reason, with some calculi I before exhibited, which were encysted near the neck of the bladder, but which were not prostatic, but uric acid calculi. Those now exhibited are composed mainly of the phosphate, with some carbonate of lime.

Mr. HENRY THOMPSON, 7th of May, 1861.

SUB-SECTION II.—GENITAL ORGANS, MALE.

10. *Entire absence of the penis, from syphilitic ulceration, simulating hermaphroditism.*

The patient, a soldier, was a young man, *æt.* 19 years, of average stature, of feminine cast of countenance, and slightly corpulent. His

statements of the nature and cause of his defect are suspicious and contradictory, and I am obliged to seek elsewhere for information. It appears that he contracted a bad syphilitic sore about two years ago, at Aldershott, which took on a phagedenic character, which resisted the energetic treatment pursued, and terminated finally in the entire destruction of the penis, producing the appearances represented in the accompanying sketch. He can now micturate freely, the stream flows

WOODCUT 12.



The figure represents the condition of the parts described.

downwards through a very small roundish tubular aperture, which would seem to occupy the position of the natural passage, but which is not at first seen, in consequence of its being overlapped by a small fleshy pedicle, like a rudimentary penis, and being besides embedded in some loose folds of puckered integument. The appearance at first sight is that of a very small foetal vagina, and, on closing the thighs, the scrotum will scarcely lose by comparison with a pair of enlarged, pendulous, or hypertrophied labia. To add to the deformity, he is slightly ruptured on the right side. The testicle on that side is appa-

rently of average size and healthiness, but the opposite one is shrunken and atrophied, and the impression of my colleagues and myself is, that it is the result of either congenital deficiency or of a very early operation.

Dr. GIBB, for Mr. W. CURRAN, 1st of January, 1861.

11. *The urethra from a case of old-standing stricture, treated by internal incision two years and a-half ago.*

J. P. first came under my care early in 1856, with a stricture of twenty-four years' standing. He was then aged 48 years, and a mechanic by occupation.

During the previous six years, the symptoms had been very severe, and he had been an inmate of more than one metropolitan Hospital.

He had passed blood in his urine very frequently for a long time, and was suffering from anæmia in consequence.

I treated him in Marylebone Infirmary, dilating the stricture up to No. 10, in about two months' time, the contraction being very unyielding.

In 1857 he again came under my care in the same place, and required another course of dilatation.

In 1858 the same condition and the same treatment followed. The stricture had become, however, increasingly difficult to dilate; the contraction was more resisting and irritable. He was quite unable to empty the bladder fully, a quantity of urine always remaining behind.

I decided on dividing the stricture by a single incision from behind forwards, which I did in University College Hospital, September, 1858, passing a No. 11 catheter into the bladder immediately afterwards. There was scarcely any blood seen; there was no pain worth mentioning, and he had not a single bad symptom after it. He was discharged in one week from the date of the operation, passing No. 11 easily for himself.

I have seen him several times during the last two years and a-half. He has continued to pass an instrument ever since; but, on one occasion, during an attack of fever, he lost his command of it, and I passed the catheter a few times, and again he employed his own instrument, as before, a No. 9, occasionally, until the time of his death. All his former symptoms were greatly mitigated; indeed, he has had none worth complaining of since the operation.

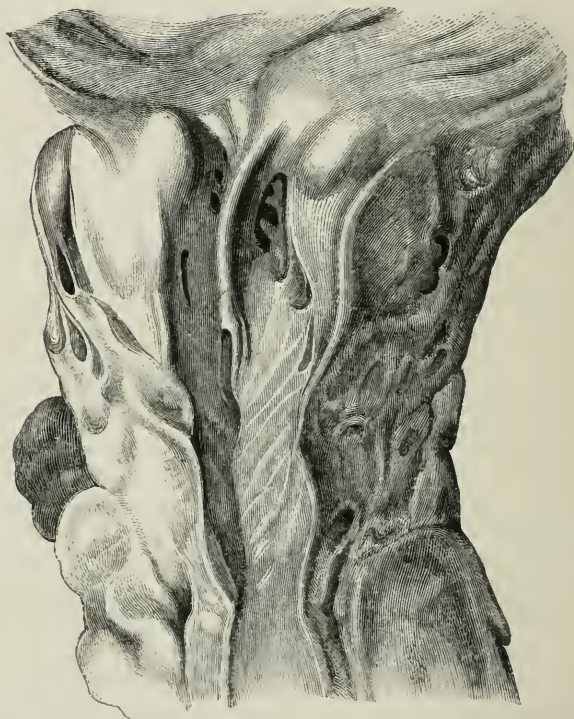
In the autumn he showed signs of increasing obstruction of the liver, which had evidently been long diseased; he had albumen in his

urine; and there was some ascites present. After a week of confinement to bed, he died during the first week of the present year, 1861.

At the *post-mortem examination* the liver presented a marked example of cirrhosis; the kidneys were small, the cortical substance much diminished, and the structure very pale in tint.

The bladder and urethra were removed and preserved. The former is large, and somewhat fasciculated. In the urethra (Woodcut 13) the

WOODCUT 13.



Represents the urethra laid open. The cicatrix left by the operation is distinctly visible at the seat of the stricture.

remains of the stricture are distinct in the posterior part of the bulbous portion, in the form of fibrous bands, beneath or outside the mucous membrane. In the midst of these, a very fine line may be seen in the longitudinal axis of the urethra, dividing them equally; this is evidently the line of the incision made two years and a-half before. There is no puckering, no appearance of cicatrix, and so far from being any

narrowing, a No. 9 passed with perfect ease through the whole canal before it was laid open for the examination.

Mr. HENRY THOMPSON, *5th of February, 1861.*

12. *Undeveloped testicle from the body of an idiot.*

A young man, æt. 19, of weak intellect, and diminutive stature, died in the Idiot Asylum, at Earlswood, of general tuberculosis. His testicles were sent me by Dr. Down, the Physician to the Asylum, with an account of the case. His external organs of generation were not more developed than those of a boy of three years of age, and he had no hair on the pubes and in the axillæ, whilst the hair on his head was of a light-brown colour, and curly, like the hair of a negro. The right testicle was found in the abdomen, two inches from the external ring. It weighed only twenty grains, the epididymis being nearly as large as the body of the gland. The left testicle was in the scrotum, and though much larger than the right, weighed only thirty-seven grains. There were no adhesions, and no marks of disease about these organs. The glandular structure resembled that in the testicles of an infant, the tubuli being inseparable. The cerebellum weighed five ounces and a-half. The fornix was softened, the ventricles contained serum, and the cineritious matter of the cerebrum was pale, the hemispheres being also unsymmetrical.

This case is an addition to the examples recorded by me elsewhere (*Diseases of the Testis*) of undeveloped testicles in persons with a defective organization of the brain.

Mr. T. B. CURLING, *19th of February, 1861.*

13. *An account of the structure and secretions of a testicle detained in the inguinal canal.*

E. W., æt. 25, a boiler-maker, tall, muscular, and well-formed, was admitted into the London Hospital November 27th, 1860, with disease of the heart, of which he died December 30th, 1861.

The genital organs were carefully examined and dissected by Mr. Couper, Demonstrator of Anatomy, on January 11th, 1861. Only one testicle, the left, was in the scrotum. In the right external inguinal ring, a soft, fibrous substance could be distinguished and felt, when rolled between the fingers, like an atrophied spermatic cord. This body did not descend into the scrotum, but ended abruptly about two inches below the ring. Although the external inguinal ring was large, and

admitted the point of the forefinger, no testicle could be felt in the canal. The left testicle was full-sized. There was no cicatrix of any kind in the scrotum. The penis was smaller than usual. There was a phimosis, and no part of the gland could be exposed. There was some light-red hair on the chin and upper lip, and likewise in the arm-pits, and on the pubes. On dividing the skin, and on opening the intercolumnar fascia, at the right external inguinal ring, a mass of loose cellular tissue, containing a plexus of engorged veins, was displayed as it issued from the ring. On raising this, and on dragging gently upon it, a small testicle, which had lain loosely in the inguinal canal, but entirely behind its cutaneous ring, came to the surface. The whole inguinal canal was then felt to be unusually capacious. The testicle lay with its back directed downwards, and a little forwards. The tail of the epididymis made a sweep beyond the testicle to the external ring, and after entering the plexus of veins already mentioned (which were a part of the spermatic vessels just leaving the testicle) curved back to end in the vas deferens. A pouch of peritoneum entered the inguinal canal, and nearly reached the tunica vaginalis. Loosely embedded in the cellular tissue of the cord, immediately adjacent to the globus major, was a thin-walled cyst as large as a hazel-nut, containing a turbid yellowish fluid. This liquid, when viewed under the microscope, held in suspension a multitude of yellowish granules, which here and there cohered in small groups. Many of them had the appearance of granule cells and others were dotted with minute highly refractive oil globules. The cyst-wall was fibrous, and had vessels ramifying on its exterior. No pedicle was seen connecting it with the epididymis. Attached to the globus major by a short pedicle was a much smaller pyriform cyst.

The testicle, with about four inches of the cord, was now carefully removed from the body, two ligatures having first been placed upon the vas deferens, and the division being made between them. The fluid in the vas deferens was thick and yellowish. Three different portions of it were examined under the microscope. Innumerable yellowish granules, but no spermatozoa, were seen. Nor did the globus major, which was flattened and small, contain any spermatozoa. In the vas deferens of the sound side, three inches from the tail of the epididymis, spermatozoa were found in abundance. In the globus major of the left epididymis, which was plump and healthy, no spermatozoa were to be detected. The tunica vaginalis of the right testicle was closed, and in all respects normal.

Blood-vessels, tunica vaginalis, and cellular tissue were dissected away from both testes and both epididymes.

Weight of right testicle and epididymis	..	132½	grains.
Weight of left testicle and epididymis	..	295½	„
Weight of right epididymis alone	..	26	„
Weight of left epididymis alone	..	28	„

On opening the fibrous tunic, the tubuli seminiferi testis were easily pulled out in long threads from the right or smaller gland, and were more elastic, and stretched much further than those of the left testis. The vasa deferentia took their usual course along the inner side of the seminal vesicle. Both vesiculæ were distended with fluid, were large, of nearly equal size, and had their usual lobed appearance. The right contained a brownish-yellow fluid, of oily consistence, in which a multitude of yellow granules and granule cells were seen under the microscope. Among these were interspersed irregularly-shaped semi-solid masses, in which neither of the two just-mentioned elements were seen. Some of them were visible to the naked eye, appearing as small islands in the preparation. No spermatozoa were discovered after a careful and prolonged search. In the contents of the left vesicle spermatozoa in great abundance were found, at once and without difficulty. Many large spheroidal cells, filled with granules, and some free granules were also seen.

This examination tends to confirm the recent views of Godard that a testicle, which is arrested in its passage to the scrotum, never secretes spermatozoa or a fluid capable of impregnating the female.

Mr. T. B. CURLING, 19th of February, 1861.

14. *Sequel to a case of removal of the testicle reported in the last volume of the "Transactions" of this Society.**

The original tumour was removed by Mr. Athol Johnson, on December 16th, 1859, from a boy æt. 5. In the description of the specimen exhibited to the Society, and in a report upon it made at the time by Messrs. Adams and Hulke, it will be seen that its appearance was somewhat dubious, but that the gentlemen who reported upon it were rather disposed to refer it to the category of malignant diseases. This opinion appears to be confirmed by the fatal issue of the case, the child having died in November, 1860. The appearances on *post-mortem* examination are thus described by Mr. Young, of Hindon, in a letter to Mr. A. Johnson:—

“I was only allowed to open the abdomen, but the amount of disease in that region was greater than I have ever before witnessed, the whole

* Vol. XI., p. 161.

of the abdomen being occupied by an enormous tumour, pushing the intestines, which were very small and shrivelled, to the right side. The transverse and descending portions of the colon lay in front of the tumour, quite flattened by pressure, and very much narrowed. I found one large cyst on the left side of the tumour. The cyst occupied about one-third of the whole mass, and contained about three pints of a yellow gelatinous-looking fluid. The abdominal parietes had hardly a trace of muscular fibre, and the whole body was wasted to a skeleton, which, with the immensely-distended abdomen, gave the poor little sufferer a frightful appearance."

Microscopical examination of the growth does not seem to have been made; but this was hardly necessary in order to establish the malignancy of a tumour, the original appearance of which was so suspicious, which grew so rapidly and destroyed life in so short a period.

Mr. T. HOLMES, 18th of December, 1860.

15. *Sequel to a second case of removal of the testicle in a young child on account of a rapidly-growing tumour.**

In this case the child was even younger than Mr. Athol Johnson's patient, and the tumour had grown with great rapidity, but no structure could be detected in it, which resembled those usually seen in malignant tumours, nor was there any "cancer-juice." It was designated, therefore, a "fibro-nucleated tumour," and hopes were entertained that it might not recur. These hopes, however, were disappointed. After remaining well for a few months, the child's health began to fail, and the belly began to swell from soft deposit in the lumbar glands. This increased rapidly to an enormous size, and he died early in March, 1861. On *post-mortem examination*, a state of things was discovered very similar to that which existed in the former patient. The whole abdomen was occupied by an enormous tumour, weighing when removed from the body more than seven pounds, which extended from the symphysis pubis to about the level of the sixth rib, pushed up the diaphragm, displaced the intestines, and was firmly united to the kidneys, one of which (the left) was buried in the tumour, and its ureter perfectly enclosed by the diseased structure. None of the viscera, however, were at all encroached upon by the tumour, nor, although it lay very close upon the spine, were the bones at all affected. Hence it appeared probable that the origin of the tumour was in the lumbar glands. The remaining testicle was quite healthy, as were all the

* Reported in Vol. XI. of the "Transactions" of the Society, p. 165.

organs of the body. On section, the tumour was extremely soft, and in some parts almost diffuent; with two or three small cysts. In the greater part of it no elements were to be seen, other than those noticed in the original tumour,* except a large quantity of oil, evidently from degeneration of the mass; but at one spot a nodule was found of different appearance from the rest of the tumour, resembling very much a portion of brain-substance, yielding a creamy juice on pressure, and showing under the microscope an abundance of large caudate cells.

The course of this disease, as well as the microscopical characters of the recurrent growth, appear to render it probable that here also the tumour was malignant; although the absence of constitutional symptoms, and of contamination of remote organs, renders that conclusion a little doubtful. The opinion, which was originally expressed as to the merely local nature of the affection, was founded on the microscopical structure of the tumour, and on the experience of several cases of rapidly-growing tumours in young children which appeared to have been innocent. It is possible that such an opinion may have been pathologically correct, and that the recurrent growth was merely analogous to what takes place sometimes after removal of tumours of the mamma allowed to be not of a cancerous nature. But the practical inference from this case and that of Mr. A. Johnson's patient would be, that we should be very cautious in our prognosis of a rapidly-growing tumour of the testicle in a young child; as such cases are extremely liable to prove fatal from early recurrence, even when their structure is not decidedly cancerous.

Mr. HOLMES, 2nd of April, 1861.

16. *Medullary cancer of the testis.*

J. D., æt. 44, a farm-labourer, was sent up to town by my friend Mr. Ewen, of Long Sutton, under whose care he had previously been. His right testis was enlarged to the size of an adult fist, and felt firm and heavy. The cord was thick, but its various component structures could be made out, and it did not appear that there was any morbid deposit in its substance. The scrotum did not adhere to the tumour, nor was the latter tender, it was, however, subject to aching pain when allowed to hang down. The history was that about eighteen months before, an enlargement of the testis had been first noticed, accompanied by a dull aching pain extending along the cord into the abdomen. The hardness after about two or three months temporarily diminished, then returned again, latterly it had steadily but slowly increased.

* It may be mentioned that the original specimen was re-examined, and the accuracy of the description of it to the Society verified.

Mr. Ewen reported to me, that he considered that the man's complexion was becoming sallow, but he still retained so much colour, that anyone seeing him for the first time would have called him healthy-looking. There was not the slightest reason to suspect syphilis. The opposite gland was in a perfectly healthy state.

Although the man complained of aching in the right loin, yet there was no evidence of any tumour there, and as the cord was healthy, I decided to remove the gland.

At the operation I first passed a large trocar into the centre of the mass, but no fluid, not even blood, escaped. After removal, a section of the tumour shewed a pale-yellow dryish surface, very slightly vascular and yielding little or no juice. It was rather tough, and resembled somewhat softened wash-leather. The tunica albuginea was entire, but there were no traces of normal testis-structure. The vas deferens was thick but healthy.

On further examination, I found near the epididymis some small portions of more recent growth, which were vascular and succulent. In these the nuclei of cancer cells, and a few large nucleated cells, were found. In the greater portion of the tumour, however, nothing at all characteristic of cancer could be found by the microscope. The structure consisted of fibroid tissue, in which a large amount of oil globules, of granular matter and of the detritus of cells was embedded. There could be no hesitation in considering the growth one of medullary cancer, though it certainly presented features in most parts remarkably dissimilar to what is usual in such growths. It reminded me somewhat of a specimen of tumour from the orbit which I exhibited some years ago,* and of two specimens of tumour of the testis from children, more recently shown by Mr. T. Holmes.† In all these cases the sequel proved that the disease was true cancer.

Mr. HUTCHINSON, 7th of May, 1861.

SUB-SECTION III.—GENITAL ORGANS, FEMALE.

17. *A fibro-muscular polypus growing from the uterus, and containing a cyst, and a small fatty tumour.*

This specimen was removed by Mr. Paget from a patient, about forty years of age. It grew from the fundus uteri by a long pedicle, which allowed it to protrude externally between the labia, and at the time of its removal was as large as a full-sized fist. On section, it was found

* See Vol. VII. of the Society's "Transactions."

† See the Society's "Transactions," Vol. XI., pp. 161 and 165.

to consist of the ordinary structure of such growths; but, in addition to a small serous cyst, it contained an adipose tumour the size of a pigeon's-egg, completely embedded in the substance of the tumour, and surrounded by a fibro-cellular capsule, from which it easily shelled out. Connected with the history of this polypus was rather a singular fact; namely, that the patient was entirely unaware of its existence, until a few days before its removal, when, during an ordinary evacuation of the bowels, the growth suddenly protruded itself from the vagina.

Mr. T. SMITH, 6th of November, 1860.

18. *Case of exfoliation of the entire mucous membrane of the womb during menstruation.*

A lady, æt 25, came from the country to consult me. She had been married two years, but had never conceived; and the only symptom complained of was the passage of a large quantity of ropy mucus from the vagina; and it appeared that this had never occurred until soon after marriage. I also ascertained that ever since her marriage menstruation had been more painful, more abundant, and almost always accompanied by some flesh-like substance. I found the neck of the womb enlarged, very sensitive, and deeply excoriated round the os uteri. While the patient remained in town for treatment, the monthly period came round; the flow was delayed a few days, when it came with so much pain and loss of blood, that Mr. Powell, of Wandsworth was called in; and he detected, in the midst of the blood, an unbroken membranous sac, about two inches and a-half long, and one and a-half broad in its upper and widest extremity. On being opened, it contained nothing but blood, and there was no trace of a fetus found in what had been passed. The inner surface of this sac was smooth and cribriform, the outer, rough, and flocculent, and it exactly resembled a decidual membrane, both in appearance and structure. When I saw the patient, a few days afterwards, I found the neck of the womb very much swollen, soft, very painful, and a large amount of ropy discharge had been passed.

In this case the patient's health had been perfect until marriage. Under marital influences the womb had often exfoliated its mucous membrane; so it confirms the views entertained by Dr. Oldham, that this complaint is independent of any previous inflammatory condition of the body of the womb. The inflammation of its neck, which began immediately after marriage, was clearly caused by its forcible dilatation by a voluminous foreign body, and the frequent repetition of the process kept alive the inflammatory condition until the present day. Some-

thing unusual is doubtless passed by the patient almost every month; but before we admit that the mucous membrane of the womb has been so frequently exfoliated, it would be necessary to confirm the patient's assertion by medical testimony.

Dr. TILT, 18th of December, 1860.

19. *Ovarian tumour; discharge of contents into abdominal cavity; condition of peritoneum, simulating colloid cancer.*

M. D., a married woman, æt. 62, was admitted into St. Thomas's Hospital, on the 20th January, 1857. She stated that she had had seven children and several miscarriages, though not within the last twenty-four years; that for the last twelve months she had been affected with a gradually increasing abdominal enlargement; that there had been slight sanguineous discharge for two months, which ceased on her maintaining the recumbent posture.

When admitted, the abdomen was greatly distended with fluid, but not so as to interfere with respiration. Her general health was not much impaired, although she had been losing flesh. Diuretics and tonics were ordered.

By the 20th of May, she had become much more distended, and began to suffer great inconvenience. It was, therefore, judged advisable that paracentesis should be performed. The operation was done in the usual way, but no fluid escaped from the canula on withdrawing the trocar, until pressure was made on the abdomen; and then a very little thick, gelatinous, clear stuff issued. The canula was removed, and an incision about an inch long made in the abdominal wall, through which several ounces of a gelatinous matter, clear and of a slightly-yellowish colour, were squeezed out. The wound was then closed.

During the day she seemed pretty well, and the fluid oozed in some quantity from the wound. In the evening she suddenly began to sink, and died, without suffering pain, in a few hours.

Autopsy, forty-eight hours after death.—Height, five feet four inches; weight, seven stone three pounds; somewhat emaciated. Abdomen much distended.

Chest.—The thoracic cavity was much encroached on by the distended abdomen. Pericardium and heart healthy. The left pleura was healthy, the right presented numerous firm adhesions. The lungs were somewhat congested, but healthy.

Abdomen.—On opening the belly, it was found to contain between three and four quarts of soft, gelatinous material. This existed in the

form of irregular tremulous masses, of various sizes and shapes, which floated in a comparatively small quantity of transparent glairy fluid. The jelly-like material was for the most part transparent and straw-coloured, but here and there somewhat opaque and whitish.

The liver and spleen were attached to surrounding parts by old adhesions, and the jelly-like substance extended into the intervals left by the irregular distribution of the adhesions, and infiltrated even the adhesions themselves. The great omentum was much thickened and adherent to the brim of the pelvis by two thick funicular processes. The whole of this latter, and the surface of the parietal peritoneum, were covered by an adherent layer, from two or three lines in thickness downwards, which consisted in great measure of transparent jelly-like matter, but was essentially a mixture of this material with ordinary inflammatory lymph. The intestines were slightly united to one another, and invested in the same kind of substance. They presented, however, numerous blackish patches, which had probably originated in congestion.

A series of cysts, many of which were perforated and allowed of the escape of their contents, were found to be connected with the uterine organs, and to project beyond the brim of the pelvis. These organs were removed in mass, and examined carefully. The uterus was natural in size and shape, but surrounded externally, like the other abdominal organs, by an adherent layer of jelly-like material. This kind of formation extended on to the broad ligaments, and rendered the arrangement of parts somewhat indistinct—the indistinctness being increased by disease originating in the parts themselves.

The left ovary formed a cystic growth, about as large as the fist. The cysts constituting it varied in size from that of a duck's-egg downwards. Their parietes were excessively thin, and marked with numerous ramifications of injected vessels, which radiated from their bases. Most of them presented circular or oval perforations, which varied in size, and by which their contents had been allowed to escape, and were still oozing, into the abdominal cavity. The largest cyst exhibited at its free extremity a perforation about an inch in diameter, with irregular somewhat retroverted edges, and through it the tenacious jelly-like contents protruded to a very considerable extent. This cyst presented likewise a longitudinal slit in its side about an inch and a-half long. From a second cyst an ovoid jelly-like mass projected, the proximal half only of which was surrounded by cyst-wall, the rest of the wall being lacerated, and forming a loose pendulous flap. In the same way that the cysts communicated with the abdominal cavity they communicated with one another; and they presented also numerous

circular thinnings, which were obviously the precursors of perforation. The arrangement of the cysts was scarcely that seen in an ordinary ovarian tumour; they were too distinct from one another, and several actually appeared isolated and springing from the broad ligament, at a distance from the ovary. There were, however, around the bases of all the cysts imperfect rims or folds of membrane covered with adherent lymph, and upon the cysts themselves were delicate crescentic or irregularly-shaped laminæ, in structure like the wall of the cysts whence they sprung. All these processes were similar in arrangement and structure to the irregular folds and septa found in common ovarian tumours, and which are manifestly the remnants of ruptured and atrophied cysts, modified by the subsequent enlargement of the parent and other cysts with which they had been connected. There is little doubt that those under consideration had been produced in the same way; and hence it seems probable that the disconnected arrangement of many of the cysts was due to the fact that the tumour, as it existed at the time of death, was to be looked on rather as the interior of an ovarian cystic growth than as an entire growth of the kind; that is to say, that the primary cyst had probably become perforated, and had dwindled away; and that the various cysts now visible were growing from different parts of remnants of the parent cyst.

The right ovary formed a tumour about as large as a pigeon's-egg, but in all other respects a counterpart of the one just described.

Under the microscope, the jelly-like matter was found to present here and there finely-granular, globular bodies, about as large as white corpuscles, and bodies similarly constituted, but having a diameter three to five times larger. It seemed as though there had been a scanty and imperfect cell-production, and that the cells had tended rapidly to grow more granular and larger, to degenerate and break down. Generally, the jelly-like matter was transparent, but here and there it was opaque, and was then found to contain numerous oil globules.

Liver pale and fatty. Spleen small but healthy. Stomach and intestines, kidneys and supra-renal capsules healthy.

Remarks.—The above case presents many points of interest, but those for which specially it was exhibited, are the following:—

1. It was brought forward to compare and contrast with a case described by Dr. Dickinson, at page 92 of the present volume. It will be clear, on perusing the two cases, that there is a great *primâ facie* resemblance between them. In his case it is manifest, whatever the

nature of the ovarian tumour may have been, that the peritoneal affection was true colloid cancer. In the one just related, the peritoneal affection so closely resembled true colloid in its appearance, that it was only after careful examination it was decided to be of a different nature; but there was then no room to doubt that the pseudo-colloid character was accidental, and caused in the manner indicated in the description of the case. Further, the ovarian growth itself had no resemblance at all to colloid cancer.

2. The case illustrated in a remarkable degree the tendency which there is in ovarian tumours to undergo spontaneous rupture. Those who call themselves practical men seem to think this a somewhat rare occurrence. The fact is, it is extremely common; adjoining cysts are constantly opening into one another, and cysts (the parent one it may be) are almost as constantly rupturing into the abdominal cavity. In both cases the steps of the process are identical; first, the outer surface of the wall yields at isolated points in consequence of the distention due to the accumulating fluid within, and circular or oval depressions of various sizes are produced; second, these enlarge in area, and deepen, and finally perforate; third, the contents of the cysts escape, the cysts collapse more or less, atrophy, and ultimately (in consequence of the growth of new cysts in their walls, of the enlargement of neighbouring cysts, and of their own shrinking) form the irregular crescentic or sinuous folds which have been above alluded to. This process was unusually marked in the case adduced, and this was obviously due to the extreme tenuity of the cyst-walls; but it differed only in degree, and not in kind, from the process as it occurs in the more ordinary cases. Dr. J. S. BRISTOWE, *5th of February, 1861.*

20. *Portion of a tumour attached to the right ovary and broad ligament.*

The tumour reached as high as the under surface of the liver, the small intestines being firmly embedded therein, as well as the lower end of the stomach. The uterus was natural in size and position; the right ovary rather larger than the left. The walls of the bladder were much thickened, and the organ was full of urine. The woman, *æt.* 43, from whom the specimen was removed, was first seen by me in June, 1860, when I made an examination of the abdomen, and felt, on the right side above Poupart's ligament, a tumour which appeared to be about the size of a cricket-ball, and which I then believed to be ovarian. Subsequently, towards the end of the year, dropsy commenced and increased rapidly.

The patient was tapped by Mr. Brennan, which gave great relief to her extreme sufferings. The fluid, however, rapidly increased, and she was again tapped with relief, but sunk after a third tapping in March, 1861.

The *post-mortem examination*, made by Mr. Brennan and myself, revealed the tumour as above-mentioned, a portion of which I produced at the Pathological Society, and got Mr. Durham kindly to examine. He reports as follows:—"On careful examination, I find that the portion of tumour consists of a firm fibrous stroma, including comparatively clear amorphous albuminous material, minute granules and molecules of fatty matter, and granules aggregating and forming nuclei and cells, more or less perfectly formed, similar to those met with in tuberculous deposit. The tumour manifestly differs in structure in different parts. The amorphous albuminous material is in largest proportion, but in parts there are opaque whitish particles, which might, I believe, have passed on into a cheesy condition. The general conclusion at which I have arrived is, that the tumour in question consists of the mesenteric and lumbar sympathetic glands, very much enlarged and infiltrated with material of low organization; this material I should hesitate to call tubercle, inasmuch as the characteristics of typical tuberculous glands are not apparent; but considering that some portions of the tumour approach more, and others less, nearly in character to tubercle, and that there is nothing in the history inconsistent with such view, I think it would be best to speak of the case as one of tuberculoid infiltration of the glands before named."

My object in bringing the case before the Pathological Society, is to show the great importance and difficulty of the diagnosis in the early stage of ovarian disease, which this tumour so much resembled.

Mr. SWETE, 19th of March, 1861.

21. *Polycystic ovarian tumour of right side, and fibrous tumour of left side, successfully removed from the same patient at one operation.*

Miss W., æt. 48, single, was admitted into the London Surgical Home, February 1st, 1861. Has always enjoyed good health until last March, when she began to notice a swelling of her abdomen, which has gradually increased up to the present time. Has had very little pain. Has not menstruated since September, but up to that time was very regular. She consulted Sir Charles Locock, who recommended her to Mr. Baker Brown for the operation of extirpation of an ovarian tumour, which he diagnosed. On examination, several points of a large multilocular ovarian tumour could be felt, also some ascites.

March 2nd. The patient had a little chloroform given her, but the pulse sank so low that its use was discontinued, so that during most of the operation she was semi-conscious. The incision was made in the median line of the addomen, and much ascitic fluid escaped, accompanied by some transparent small cysts with long pedicles attached to the ovarian tumour. On passing his hand into the abdomen, Mr. Brown found there were no adhesions. The first incision, which was three inches long, had to be enlarged on account of the size of the tumour. There was one large cyst tapped and the fluid drawn off, and there were then left two large solid-feeling masses of cysts, one deep in the pelvis, and the other rather on the left side. These were brought out, and the pedicle, which was longer than usual, fastened with the clamp, and the tumour removed from the right ovary. On examining the uterus, there was found a hard round tumour in the situation of the left ovary, about the size of a large hen's-egg; the pedicle of this was transfixed and tied by a double ligature, and the tumour removed. The abdominal incision was then closed by silver-wire sutures. There was no hæmorrhage.

March 3rd. Clamp removed. 10th. Ligature came away. The patient had not a bad symptom, with the exception of rather troublesome sickness for the first two days, when she was fed by injections. March 18th. Wound very nearly healed.

The large tumour was found to consist of one large parent cyst, with a number of others, varying in size, developed from its interior. Some were very small, resembling nests of cysts. Those exceeding the size of an egg contained fluid of various kinds, the colour, consistence and composition varying. The smaller tumour removed from the left side was fibrous in its structure, and appeared to be a degeneration of the ovary into fibrous tissue. The case was interesting from the difference in the nature of the two tumours.

The present instance makes the ninth case of ovariectomy performed at the London Surgical Home, and the sixth recovery.

Dr. GIBB for Mr. BAKER BROWN, 19th of March, 1861.

22. Ovarian cyst, which proved fatal by spontaneous rupture.

The patient was married, æt. 53. She suffered from a large abdominal tumour, surrounded by ascitic fluid. Eight pints of this fluid were removed by tapping on February 25th, 1861. The patient remained well during the night and following day; but on the second night she became suddenly hysterical, restless and sick. On the third day the

abdomen was found nearly as large as before the tapping; and there were all the signs of low peritonitis. She died on the sixth day after tapping. A large compound ovarian cyst was found, covered by flakes of recent lymph. A cyst on the lower and posterior part of the tumour had given way, and its contents had escaped into the peritoneal cavity. The thicker portion had gravitated to the pelvis, which was filled by a mixture of ovarian fluid, serum, and some blood.

Mr. SPENCER WELLS, 19th of March, 1861.

23. *Ovarian cysts and tumours removed by ovariectomy.*

In the last (XI.) volume of the "Pathological Transactions," pages 165-171, the series of cases, in which Mr. Spencer Wells had performed ovariectomy, was completed by an account of twelve specimens, up to the last Meeting of the Society in the Session 1859-60. The following specimens represent the whole of his operations in the Session 1860-61.

1. A compound cyst, was removed October 16th, 1860, from a lady, *æt.* 53. It consisted of a very large cyst, which had contained between forty and fifty pints of fluid, and of groups of smaller cysts, growing in and from the walls of the principal cyst, and weighing about eight pounds. The patient perfectly recovered. (The details of the case are published in the *Medical Times and Gazette*, December 1st, 1860.)

2. This specimen consisted of a mass of small cysts, weighing upwards of eight pounds, and of a large cyst which had contained about twelve pounds of fluid. The tumour was removed on the 22nd of January, 1861, from a married woman, *æt.* 54, who perfectly recovered. (The case is published in detail in the *Medical Times and Gazette*, February 9th, 1861.)

3. This dried specimen was removed in July, 1860, from a married woman, *æt.* 41, who also recovered perfectly. About twenty-two pounds of fluid, and four pounds of small cysts were removed. (The case is recorded in the *Medical Times and Gazette*, August 25th, 1860.)

4. This was a large compound cyst with flakes of lymph adhering, and the lining membrane of the largest cyst, which had been removed from a single lady, *æt.* 36, in July, 1860. The patient has since enjoyed excellent health. (The case is recorded in the *Medical Times and Gazette*, August 25th, 1860.)

5. This was a compound cyst, which, with its contents, had weighed about sixteen pounds. It was removed on the 9th of March, 1861, from

a single lady, æt. 22, who recovered perfectly. A fibrous mass, about the size of a fist, appeared to be the thickened and corrugated wall of a cyst, which had been injected with iodine, fourteen months before operation. (Case recorded in *Medical Times and Gazette*, May 25th, 1861.)

6. This tumour was removed from a lady, æt. 55, on the 15th of April, 1861, who perfectly recovered. (The case is recorded in the *Medical Times and Gazette*, May 25th, 1861.)

7. This was a large compound cyst, with walls of unusual vascularity. It was removed on April 16th, 1861, from a married woman, æt. 41. She died of exhaustion, twenty-four hours after operation. (The case is recorded in the *Medical Times and Gazette*, May 25th, 1861.)

These seven cases, six recoveries and one death, made twenty-four cases, in which Mr. Wells had performed ovariectomy; the total result having been eight deaths and sixteen recoveries. All the tumours which he had removed had been brought before the Society, and are noticed in former volumes of the "Transactions."

MR. SPENCER WELLS, 16th of October, 1860,
and February 5th, March 19th, and April 16th, 1861.

24. Case of calcified tumour removed from the abdomen.

The tumour, unsuspected during life, was removed from the abdomen of a woman, 90 years of age, the widow of a private in the army, who had accompanied her husband through the American war.

She laboured under senile insanity, and died of general dropsy (with ascites) after an illness of a few weeks, about three months after her admission into the Asylum. She did not suffer from pain, or from other symptom referrible to the tumour.

The heart weighed fourteen ounces; its cavities were somewhat dilated, and also the orifices; there may have been some regurgitation. The liver presented the "nutmeg" appearance. In the right iliac region, extending up towards the liver, and inward to the umbilicus, was the tumour, the size of a child's head, and weighing three pounds and a-half (avoir.). It was attached slightly on all sides to the intestines, the parietal peritoneum, and the omentum; in the folds of which last it appeared to have been developed. At first, it was suspected to be ovarian, but its situation above the brim of the pelvis seemed to negative such a conclusion, though the broad ligament of the uterus was in some measure attached to, and expanded over, the lower surface of

the tumour. The right ovary was believed to be found, in an extremely atrophied condition, at some distance below the tumour, and near the small and atrophied uterus. I have several times observed nodular tumours in the omentum, and other parts of the peritoneum, the size of a child's marble, and once, I think, as large as a walnut. These were of a fibro-cartilaginous structure, and, like that before us, half calcified or ossified. I have on no occasion seen a tumour of this description which at all approached in size that now exhibited; nor do I recollect such in the course of my reading.

Dr. PEACOCK, for Dr. THURNAM, 7th of May, 1861.

Report on the above case.—This tumour presents microscopically exactly the appearances of a so-called uterine, "fibrous tumour." It is altogether made up of fibres, for the most part parallel, which resemble closely those of the muscular coat of the uterus.

The different stages of calcification are beautifully seen in microscopical preparations, taken from various parts of the tumour. In some, which to the naked eye appear quite free from earthy matter, the process of calcification has, nevertheless, begun; and with the help of the microscope, very minute, strongly refractive globules are distinctly visible between the fibres. In less calcified parts, they are widely separated from each other; but where the process is further advanced, they become more and more densely packed, till they entirely coalesce, forming then one compact mass of earthy matter, with no apparent structure.

The fibres and the calcification are the only microscopical appearances which are to be detected in this specimen, and from their existence alone it cannot be positively asserted that the tumour originated from the uterus.

But looking to the size of the tumour, which is, as far as we can make out, much beyond anything that has yet been observed in fibrous tumours of the omentum and ovaries; and considering, that in Dr. Thurnam's statement, the exact site and the connection of the tumour to other parts has not been quite definitely described; seeing, also, that in size, shape, and structure this specimen corresponds entirely to tumours which not unfrequently originate in the walls of the uterus, we believe the tumour before us to be uterine.

Dr. EDMUND MONTGOMERY, 21st of May, 1861.

VI.—DISEASES, ETC., OF THE OSSEOUS SYSTEM.

1. *Fracture of the neck of the condyle of the lower jaw, with displacement of the lower fragment into the meatus auditorius externus. Serous discharge from the ear.*

J. L., æt. 50, was admitted into St. George's Hospital, on July 20th, 1860. It seemed that he had been sleeping in a hay-loft, and being drunk, had walked out of the window during the night. He was found lying on the ground, and was brought to the Hospital at half-past four A.M. He was then sensible, but seemed to be stupid from drink. There were several cuts about the face, and one beneath the chin. Blood was flowing from the right ear. There was some ecchymosis about the right temporo-maxillary articulation, and crepitation was detected in that neighbourhood, though not very distinctly. He was unable to move his jaw, and complained of intense pain in trying to do so. The mouth was drawn to the right side. The pupils were natural.

On the following day, considerable serous discharge was noticed to flow from the ear. In the evening, he was very restless and feverish; but no head-symptoms were observed. Next day (the third), the discharge continued mixed with blood, and there was great pain in the head. He had considerable difficulty in speaking. On the fourth day from the accident, the symptoms of delirium tremens became more marked, and he sank rapidly, dying in the evening. Other extensive injuries existed, of which no mention need be made here. It is sufficient to say, that the skull, the brain, and the cerebral membranes were perfectly healthy.

On examining the tympanum, traces of blood were found in the mastoid cells, but hardly a drop in the tympanum itself. A probe passed into the tympanum through the external meatus without resistance, and after dissection, a large rent was seen at the upper part of the membrana tympani. This was probably, in great part, produced by the dissection. The meatus externus was full of clotted blood, and serous fluid could be seen exuding from the ear.

The temporal bone was carefully examined, but no fracture was found. The lower jaw was fractured in two places: viz., through the base of the coronoid process, separating that process from the rest of the bone, and through the neck of the condyle. The condyle remained in position, and the joint seemed in all respects healthy. The lower fragment was somewhat displaced, and had produced laceration of the

meatus, separating the cartilaginous from the osseous portion for nearly half of its circumference. A large quantity of blood lay around the fracture, and in the neighbourhood of the bone there was some fluid of a sero-purulent appearance. The preparation submitted to the Society consisted of the three fragments of the lower jaw and the greater part of the temporal bone, showing the laceration of the meatus auditorius. In consequence of the dissection that had been undertaken in order to open the tympanum and mastoid cells, the integrity of the petrous portion of the temporal had been destroyed; but the absence of fracture, and the course which the blood had taken, were still shown by the contrast between the meatus, which was lined with clotted blood, and the mastoid cells and tympanum, in which hardly a trace could be found.

This case is interesting, as showing a source, for the sero-sanguineous discharge sometimes noticed from the ears in injuries about the head, which has as yet been little dwelt upon, if not indeed entirely passed over in our surgical works. Some cases, and a paper on sanguineous discharge from the ear in injuries of the face, by M. Morvand, may be found in the *Archives Générales de Médecine*, for 1856; but in M. Morvand's own cases, the sanguineous discharge was in very small quantity, and, as the injury was trivial, no opportunity of investigating the source of the hæmorrhage occurred. In one of them it may be conjectured, that as the ear remained deaf, the membrana tympani had been injured, but the others seem instances merely of slight contusion. M. Morvand quotes a case, however, in which the glenoid cavity had been fractured. In M. Morvand's cases, the fluid seems to have been pure blood. In the one before us, the serous element predominated.

It was difficult in the present instance to come to a confident diagnosis, since the delirium might have been due to injury of the brain. This case might assist the surgeon to a correct opinion.

In Vol VI. of the "Transactions" of this Society, p. 23, will be found an account, by Mr. Gray, of another case, in which long-continued serous discharge from the ear existed without fracture of any bone. There the fluid must have come from the mastoid cells, which were laid open by a rupture of the membrana tympani. - It is possible, that in the case before us, some of the discharge may have come from this source; but I think it is quite clear that the greater part, at any rate, of the serum must have drained away from the clot of blood around the fracture, since, at the *post-mortem* examination, the auricle was found filled with serous fluid, and the meatus lined with coagulated blood, while only a very slight trace of blood, and no appreciable quantity of serum were found in the tympanum and mastoid cells, the

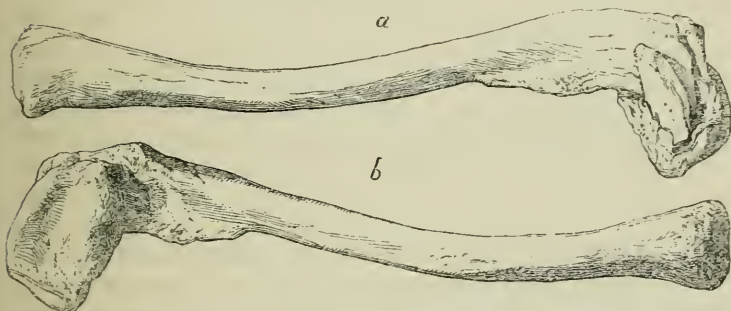
blood having in all probability soaked into the middle ear through the rent in the membrana tympani. Again, in Mr. Gray's case, the membrana tympani was found inflamed, and doubtless this inflammation propagated to the rest of the lining membrane was the exciting cause of the discharge. In the present instance, the membrane was quite free from inflammatory appearances, and the only trace of pus was around the fracture.

Mr. T. HOLMES, 16th of October, 1860.

2. *Comminuted fracture of the clavicle, between the coraco-clavicular ligaments, and acromio-clavicular joint.*

An elderly woman was knocked down, run over by a cab, and died in a few hours afterwards, from the injuries she had sustained. Her left clavicle was fractured in the manner and situation above mentioned, and below sketched (Woodcut 14).

WOODCUT 14.



Represents the fractured clavicle on its superior and inferior aspects.

The fracture is oblique, from without, inwards; the external fragment had become placed beneath the inner one, and, at the same time, directed, almost immediately forwards. Two pieces of the former have been detached, and are lying above the latter (*a*).

Mr. Canton stated, that he had brought this specimen under the notice of the Society, as confirmatory of the original observations of Professor Smith of Dublin, who, in opposition to the general opinion regarding the amount of displacement which occurs in this particular fracture, observes:—"It is frequently carried to such an extent, that the fragments form a right angle with each other." The cases and illustrations adduced by Professor Smith, in his work,* fully bear out

* "A Treatise on Fractures in the vicinity of Joints," p. 209. Dublin, 1847.

the above remark. His specimens, however, are all of *united* fracture; whereas, the instance, before the Society, is a *recent* one; and it demonstrates, moreover, a point which is not quite in accordance with a statement made by the above authority, viz.:—"The derangement, as regards the thickness of the bone is very slight, so that there can scarcely ever be any overlapping of the fragments." In the present example, the fracture has passed obliquely through the bone, from above to below, and, from without inwards; and it is seen that the outer fragment (*b*) is placed distinctly, and for some little extent, beneath the inner one, the fractured extremity of which is thin and sharp-edged.

Mr. E. CANTON, 6th of November, 1860.

3. *Parts removed in an excision of the elbow-joint.*

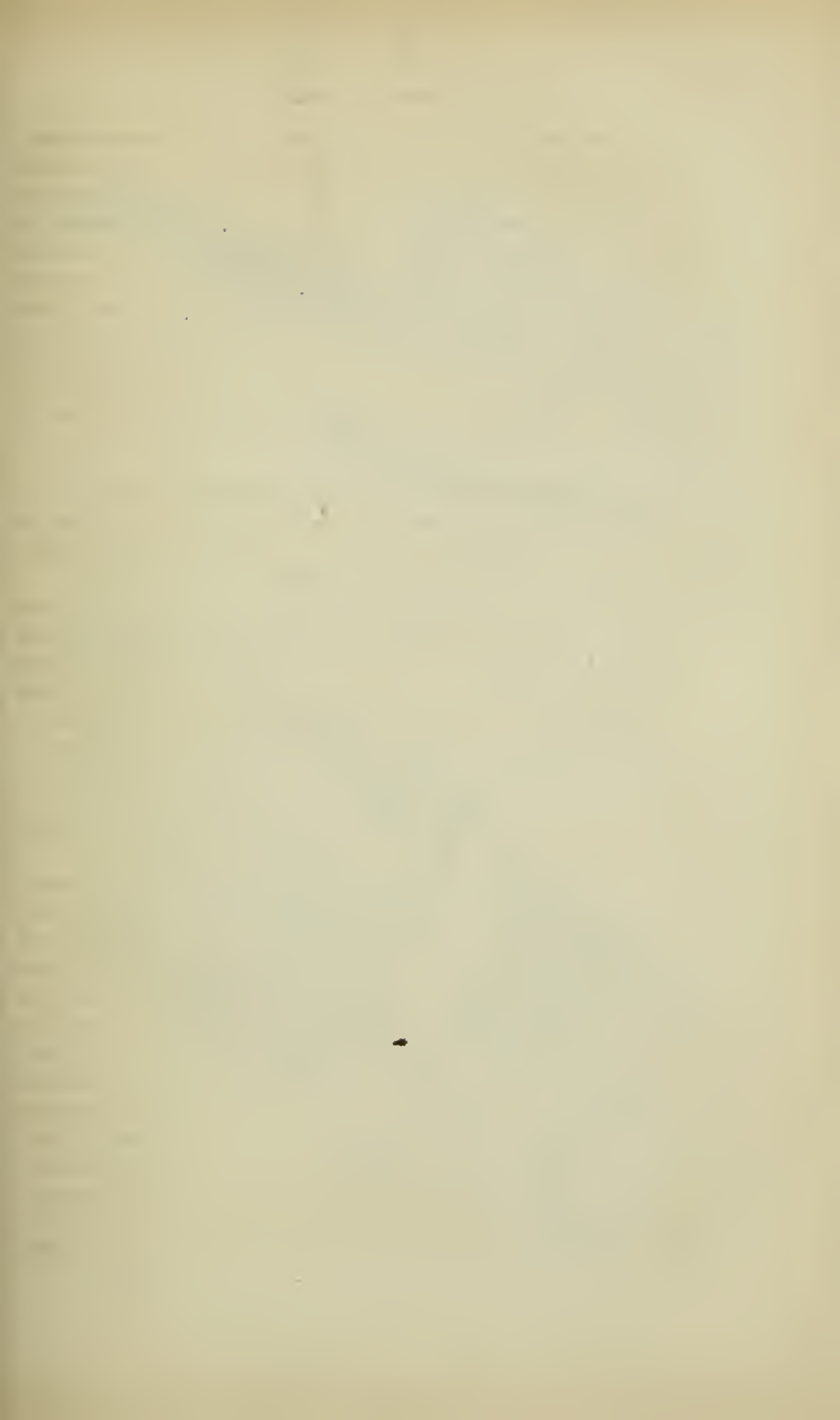
The parts exhibited were removed by Mr. Hilton, from the elbow of a girl, *æt.* 16. Nine weeks previously she had received an injury, which was followed by acute suppurative inflammation in the joint.

No portion of articular cartilage remained on the extremity of the humerus. In places the bone was carious, in others covered by soft granulations. The head of the radius also was covered with granulations. The cartilage of the ulna was entirely destroyed, and the base of the olecranon process was perforated by a remarkable round hole.

Mr. DURHAM, 6th of November, 1860.

Numerous specimens of chronic rheumatic arthritis of the hip, elbow, knee and spine, with extensive calcification of the arteries.

Mr. Canton observed that although many specimens of chronic rheumatic arthritis had been brought under the notice of the Society, there was a point, withal, in the history of the disease which had not received its due share of attention, viz., its symmetry. For the most part, it will be found that the peculiarities of one articulation are, with accuracy, repeated in the fellow-joint. This is well illustrated in the hip, and many of the examples now adduced demonstrate the fact. Nevertheless, there were preparations before the Fellows showing that one hip may be extensively affected, whilst the opposite joint presents not a vestige even of the disease. Had, in these instances, a blow, strain, or other form of injury to the part, been the starting-point for the development in it of these peculiar changes, as in the examples mentioned by Benjamin Bell, and as was the case with the elder Matthews (the comedian)? for, in the elbows, wrists, and hands of two of these



DESCRIPTION OF PLATE VII.

The Figures illustrate Mr. Canton's communication on Chronic Rheumatic Arthritis of the Knee and other Joints, p. 163.

Fig. 1. The lower extremity of the femur of the right side, from within, showing the great and irregular expansion of its articular surface.

Fig. 2. The upper extremity of the tibia of the same side, with the patella remaining attached. A deep socket for reception of the femur is seen to be formed by numerous additamentary masses; the misshapen appearance of the latter is well shown in the Figure.

a. The tibia.

b. The patella.

c. The articular socket.

In this case the deformity of the knees was symmetrical.

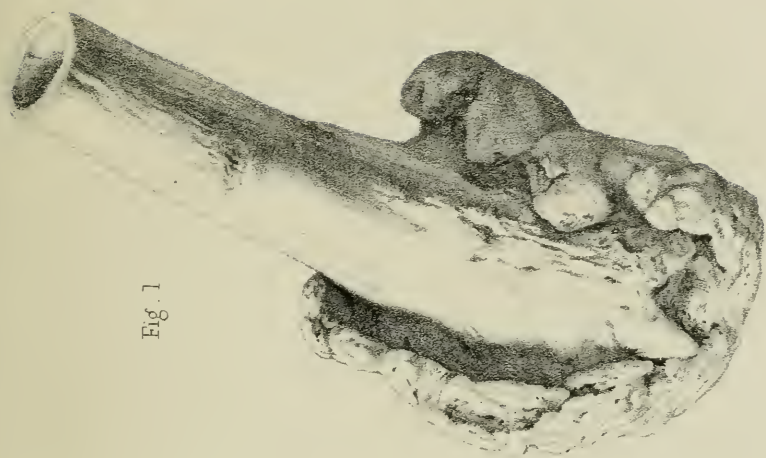


Fig. 1



Fig. 2



subjects, perfect symmetry of chronic rheumatic arthritis existed. In them, moreover, symmetry in the form and extent of the calcification of the arteries of the upper and of the lower limbs prevailed.

In ginglymoid joints, distortion may proceed to so great an extent that the natural form and functions shall be completely lost, as we not unfrequently see to be the case with the hands; but, the larger hinge articulations do not, as a common rule, become so severely affected. In this specimen, however, (Plate VII.) the deformity of the knees—and which is symmetrical—is very great, whilst the power of motion has been completely lost, from the enlarged condyles of the femur (Fig. 1) having sunk into greatly deepened tibial sockets (*c*), and, the whole being surrounded by large and numerous additamentary masses of calcareous tissue. The patellæ (*b*) are misshapen, expanded, and with their articular surfaces, like those of the femora and tibiæ (Fig. 2), eburnated. It is a curious circumstance that no ankylosis existed. Ankylosis may be said to be no feature of this malady, whatever the joint attacked.

In looking at these specimens, we cannot but be struck with the probable explanation they afford of the source of those severe pains so commonly experienced by patients, in whom the superadded bone must be continually encroaching on, and irritating, the articular nerves.

From microscopical inquiry we learn that, although this affection has been presumed to be one form of gout, there is, nevertheless, no urate of soda to be detected in any of the joint textures; whereas, in the pure form of gout, this salt may be found in the bones, cartilages, ligaments, &c. Though the descriptions of the morbid alterations occurring in chronic rheumatic arthritis are numerous and accurate, its *real pathology* is still a mystery. A careful analysis of the blood has yet to be made. Treatment is unavailing, and, “what *essentially* is chronic rheumatic arthritis?” remains a question still unanswered.

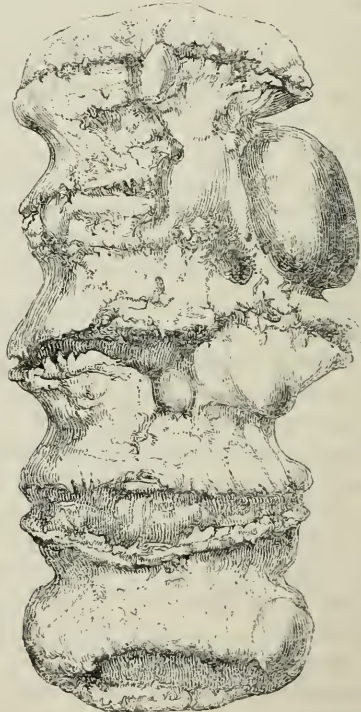
The spinal column is a part which shows often, in a marked degree, the various changes induced by this faulty condition of the system, and their peculiarities are as characteristic of this strange malady in this region as when its effects are elsewhere demonstrated; indeed, it is by no means uncommon to find, after death, the whole spine more or less affected, though no symptom had existed during life to bespeak the mischief. But it is rare, on the other hand, to discover the disease in this region alone, and in examination of the different other joints we may be sure of finding evidence, in a few or many of them, of the ravages of chronic rheumatic arthritis.

When the amphiarthrodial articulations of the vertebræ are much implicated, the height of the column is diminished, and the body be-

comes permanently bent forwards. Lateral deflection is more rare, but may accompany. The intervertebral discs undergo great changes; their depth decreases materially and they become brownish and friable, whilst, from the compact margins of the bodies of the bones, osteophytic growths arise, and, uniting with similar processes above and below, enclose the degenerated fibro-cartilages, and conceal them from view; a condition to which Cruveilhier has applied the term, "ankylosis by invagination."

Sometimes it happens that, in addition to the growing together of the vertebræ, the calcareous salts are deposited in still greater superabundance, and form masses which project from the surface of the column; these almost invariably spring from the antero-lateral aspect, and are placed over an intervertebral disc. The specimens before the Society illustrate these particulars, and from one of them the annexed engraving has been made (Woodcut 15).

WOODCUT 15.



Represents a portion of the spine, altered as described in the text.

I have never seen this disease at a comparatively early period of life ; but that it may then and there occur we learn from the late Dr. Todd,* who states that among the inmates of the Wandsworth Union is a poor girl, aged twenty-five years, who is the most complete martyr to this disease in all the joints, *even in those of the cervical vertebræ.*

Co-existence of calcification of the arteries.—I believe the not unfrequent association of calcification of the arteries—and especially those of the extremities—with chronic rheumatic arthritis, has not been pointed out by authorities on the latter affection, although it is very generally admitted by writers on diseases of the blood-vessels, that with gout and rheumatism there is for the most part connected fatty and calcareous degeneration of these canals, and these maladies are commonly enumerated among the *causes* of such degradation of tissue.

In a case to which reference has been already made, and from which the drawing of the lumbar spine was taken, I found, in addition to great change which had taken place in the aorta, that the arteries of the limbs were converted into rigid tubes, so completely had calcareous salts usurped the place of the normal tunics. The accompanying woodcut (16) displays well, too, the irregularly-knotted state of the so altered radial and ulnar arteries. During life this condition could be readily felt. The patient was a man, *æt.* 74, who had died, under my care, of dry gangrene of the right leg. In another man, *æt.* 83, large and well-made, I found precisely analogous changes in connection with chronic rheumatic arthritis of the hips, shoulders, elbows and spine. I may allude also to a gentleman, *æt.* 73, now under my care, whose hands are greatly affected with *nodosity*, and in whom the radial arteries are to be found hardened, tortuous, and, as it were, finely-mamillated down to the wrists. No disease is to be detected in any other joints in the body than those mentioned. His health is excellent.

That life may be continued to an advanced period with this condition of the arteries is shown in the above cases ; and the fact is additionally illustrated by the case of Dr. Mounsey, who died at the age of *ninety-six*. At the autopsy it was found that “the septum between the auricles of the heart, as well as the tricuspid, mitral and semi-lunar valves were so greatly ossified as to excite wonder how the circulation could be carried on. The iliac arteries were also much ossified, and the femoral, as well as all the other large arteries, *extending to the very toes, were nearly continued tubes of bone.* The vertebræ of the spine were spongy, and their intermediate cartilages nearly absorbed. Some of them had grown together, and others were covered with exostoses of

* “Practical Remarks on Gout, Rheumatic Fever,” &c , p. 180. London, 1843.

bone. The whole spinal column was much shortened, and did not appear to possess half the height it did in middle age."* Morgagni

WOODCUT 16.



ORRIN SMITH, SC.

Represents the radial and ulnar arteries, as altered by extensive calcareous deposit.

speaks of ossification of the valves of the heart, and of the arteries, occurring in a very old man, who died "partly of old age, and partly of catarrh without fever. The thick ligaments between the vertebræ

* *Vide* "Essays on the Changes of the Human Body, at its Different Ages," by Dr. Jameson, p. 145. London, 1811.

of the spine were prominent on their anterior surface, and projected the breadth of a finger at the sides; while the whole of those on the left side, and two on the right side, were bony."*

MR. E. CANTON, 20th of November, 1860.

5. (A) *Fracture of the skull in the occipital region, with laceration of the Torcular Herophili.*

(B) *Laceration of the two internal coats of the axillary artery.*

(A) The patient, a man *æt.* 54, was riding a horse in Hyde Park, which threw him, and, it was said, also kicked him on the head; but the latter seemed doubtful. He was brought into St. George's Hospital immediately, and was then sensible, and able to walk into the ward, although he staggered in walking, like a drunken man. There were two small scalp wounds over the occiput, one of which led down to a fissure running vertically downwards, but with little separation of the edges, and no depression. When seen a short time after the accident, a large quantity of blood was perceptible beneath the scalp.

He was again seen about an hour later, and had then entirely lost consciousness; the breathing was stertorous; he was restless, but without any distinct convulsion; the face was pale, the pulse weak, and he was insensible to pain. Blood was trickling slowly from the right nostril. It was decided that operative interference would be useless, and he died shortly afterwards, having survived the accident less than four hours.

On examination of the skull, the highest part of the fracture was found to be a nearly horizontal branch, running through the lower and back part of the left parietal bone; but it seemed that the occipital bone had been the one struck, as there were numerous lines of fracture dividing it, and passing into the foramen magnum; between two of these, and nearly corresponding to the situation of the Torcular Herophili, was a small, sharp splinter of bone, loose and projecting inwards. This had caused a small wound in the Torcular itself, which would just admit a probe. The fracture also traversed the right tympanum, and terminated in the cribriform plate of the ethmoid on that side. No part of the fracture presented any depression, though some parts of the fissure were rather widely separated. Between the bone and dura mater lay a very large clot of blood, which was traced to the laceration in the Torcular, but was almost confined to the left side of the cranium, where the middle lobe of the cerebrum was deeply indented. There was hardly any blood in the arach-

* "De caus. sed. morb." Ep. xxxvii. A. 30.

noid cavity; but the right anterior lobe of the brain was deeply lacerated below, and both lobes of the cerebellum were bruised, and a great deal of blood had been poured out in the sub-arachnoid space in connection with these injuries. The deeper parts of the brain were natural.

Wounds of the Torcular must be assumed to be of rare occurrence. In Mr. Prescott Hewett's lectures on "Injuries of the Head" (*Medical Times*, May 22nd, 1858, p. 519), two cases will be found referred to, one published by Chassaignac in the *Bulletin de la Société Anatomique*, 1841. This, however, was doubtful: the author's statement is, that "there appeared to be a small perforation of the Torcular Herophili; but the thing was not perfectly clear." There was, however, fracture of the occipital bone, and extravasation of blood above the dura mater. The patient lived six days, with intense delirium, but no paralysis.

The other case referred to by Mr. Hewett was that of a patient in St. George's Hospital, and the preparation of the fracture is still in the Museum. The perforation was not, accurately speaking, in the Torcular itself, but in the longitudinal sinus close to it. In that case, also, there was furious delirium and convulsive movements, but no paralysis; and here, as in M. Chassaignac's case, the absence of paralysis was probably due to the free exit of blood through the fracture.

The symptoms in the present case, which would have followed the lesion of the great venous channel, were so masked by those of the internal hæmorrhage connected with the extensive laceration of the brain, that no certain conclusion could be come to. When Mr. Prescott Hewett saw him, shortly after the occurrence of insensibility, it appeared plain that the unfavourable change in the case must be due to intra-cranial hæmorrhage; but nothing in the symptoms warranted the presumption that the bleeding was between the bone and dura mater; in fact, the absence of paralysis in the limbs, and the situation of the wound rather negated such an opinion, while the profoundness of the insensibility, and the indications of rapid sinking, seemed to point to laceration of the brain. In another case, however, the injury to the vessel might exist without any lesion of the brain, and in such a case, it would doubtless be right to cut down upon and give exit to the blood.

(B) The same case afforded an example of laceration of the two internal coats of the axillary artery.

On his admission, the pulse was felt in the affected arm distinctly, but beating very slowly and weak. As it was thought that this affection of the pulse was caused by the injury, the two arms were not

compared. No further note of the pulse was taken till a little after twelve o'clock, more than two hours after the accident, when it was found that there was no pulse in the left wrist, while the pulse was plainly perceptible in the opposite radial artery. At the same time, the radial vessels on the affected side could be plainly felt by the side of the tendon of the supinator longus muscle. The brachial artery was next examined and found pulseless; but on sinking the fingers deeply into the axilla, the pulsations of the axillary artery could be felt quite distinct, and the point at which they ceased plainly ascertained, near the lower edge of the axilla. The axillary artery must have been affected at the moment of the accident, either by a strain upon the vessel with the hand thrown away from the side, or by a blow from the horse's foot. There was, however, no mark of violence; and on dissecting the parts in the axilla, only a small quantity of blood was found in the cellular tissue. No large vessel was found ruptured, though the principal veins were carefully traced. The axillary artery was quite natural above. Below, it looked swollen and black; and on removing the artery from the body and laying it open, it was found that the two internal coats had been ruptured transversely, dissected off from the external for about half-an-inch at the lower edge, and turned back into the cavity of the vessel, which was thus blocked up. The interval so left, where the continuity of the vessel was maintained by the external coat only, was filled by a red coagulum.

Mr. T. HOLMES, 20th of November, 1860.

6. *Ankylosis of the hip-joint. Peculiar bony union between the small trochanter of the femur and the anterior inferior spinous process of the ilium.*

This specimen was removed from the body of a young woman, who died in St. George's Hospital of chronic disease, unconnected with the alteration for which the specimen was exhibited. No history was elicited throwing light upon the diseased bones.

At the *post-mortem examination*, the complete flexure of the right thigh upon the abdomen was remarkable, but did not appear to be so great as might have been expected. After maceration, the head of the femur was found to be firmly ankylosed with the acetabulum, the surfaces of the neck of the femur, and of the surrounding portions of the ilium being perfectly continuous, the juncture being only marked by some slight bony nodulations, chiefly prominent at the under surface. Moreover, the femur was so completely flexed, that its shaft was placed at right angles with the anterior part of the crest of the ilium, the apex of the

great trochanter pointing almost directly downwards; and the small trochanter of the femur was intimately welded with the anterior inferior spinous process of the ilium, these processes being much thickened, and their surfaces being only interrupted by a slight transverse line. In this manner a foramen (Woodcut 17 *a*) was formed between the root of the neck of the femur and the under part of the spinous process in question, which would about admit an ordinary cedar lead-pencil.

Remarks.—The interest of the case arose from the complete unification, so to say, of the femur and the pelvis, and from the peculiar connection between the opposed processes, the small trochanter of the femur, and the anterior inferior spinous process of the ilium. The history of the disease was not ascertainable, but probably the morbid appearances were the result of strumous disease of the joint. At what exact period this took place could not be ascertained—most likely quite in early childhood: possibly, as was suggested by some member of the Society, it might have been congenital.

Woodcut 17 shows the condition of the femur and the pelvis, and

WOODCUT 17.



Represents the ankylosis of the right hip-joint, the thigh being firmly flexed upon the abdomen.

their relative position; also the flexion of the femur, and the intimate union between the anterior inferior spinous process of the ilium and the small trochanter of the femur.

DR. JOHN W. OGLE, *4th of December, 1860.*

7. Bones from a case in which amputation had been performed ten months after excision of the knee.

Mr. Holmes exhibited the parts removed by amputation ten months after an operation for excision of the knee, which had been, at one time, believed to be successful.

The patient, J. P., æt. 19, had suffered from disease of the right knee for six years, and had been in various Hospitals, amongst others in St. George's. Excision of the joint was performed at the Royal Free Hospital by Mr. Gant.* He so far recovered, as to be able to bear a little weight upon the limb, while standing on crutches; but it never (according to his account) became stiff, and he had never, at any time after the operation, been able to raise it from the bed. He was again admitted into St. George's Hospital, on August 1st, 1860, under the care Mr. Cæsar Hawkins, for the purpose of having the limb removed. He was then in a state of great emaciation and weakness, with constant pain, and discharge from numerous sinuses around the situation of the joint. Amputation was performed on August 16th, and he made a rapid recovery.

The preparation exhibited to the Society consisted of the popliteal articulating ends and part of the shafts of the femur, tibia and fibula, together with the uniting material. The soft parts and muscles had been dissected away; and it is only necessary to say, with respect to them, that all the soft parts in front of the joint were greatly thickened and indurated, and that the quadriceps extensor had taken a new and firm attachment, by means of a broad aponeurosis, to the lower end of the femur, the other muscles not having been interfered with. The tibio-fibular joint was natural. The patella had been removed in the operation. A very thin section only seemed to have been taken away from the tibia and femur, the section of the latter bone appearing to slope obliquely upwards towards the external condyle. At the back part of the surface of the inner tuberosity of the tibia, was a deep carious cavity, in which two or three very small fragments of dead bone had been lodged. A large extent of the upper surface of the tibia around this

* The details of the case up to this time, and of the operation, which was then supposed to have been successful, will be found in the "Lancet," Aug. 4th, 1860, p. 109.

was rough and exposed. Hardly any union existed between the bones at the back part; but a strip of ligamentous tissue, about half-an-inch broad, passed obliquely upwards and inwards, from one bone to the other. This was conjectured to be a fragment of the ligamentum posticum Winslowii, altered in direction. In front the femur, which was slightly displaced inwards, and advanced upon the tibia, was firmly soldered to it by a structure which was in great part bony, mixed with fibrous tissue: here and there, however, rounded nodules were seen in the uniting material, of a bluish colour when fresh, semi-transparent, and showing under the microscope, very plainly, the characteristic nuclei and intercellular substance of true cartilage, with ossification progressing in various parts. A whitish material was found on the anterior surface of the condyles of the femur, which appeared to be the remains of the original articular cartilage; this, however, was not continuous with the cartilaginous nodules above mentioned, and it had lost its original cartilaginous appearance, from fibrous and fatty degeneration. Hence the cartilaginous material was thought to be a portion of the new uniting medium, and not a part left behind from the original cartilage. The union was found to be soft, so that a slight amount of flexion was still possible. The ends of both bones, but especially the femur, were much expanded, and the superficial laminæ so separated from the subjacent bone as to crackle under the finger.

This case seemed interesting, both in a surgical and pathological point of view. With reference to the former, it showed how promising may be the immediate prospects of a case of resection, and how near it may actually advance to a successful result, and to healthy union of the divided bones, while yet unfavourable constitutional conditions may subsequently cause disappointment of the hopes at first entertained. Hence it may be inferred, that we should always receive with considerable reserve the account of 'cures' after resection, unless the fact of cure be established by the healing of all the sinuses, the restoration of the functions of the limb, and, in the case of the knee-joint, the firm union of the bones. It was said that, in this patient, habits of masturbation combined with other causes of constitutional weakness.

The point chiefly interesting, pathologically, is the very perfect character of the cartilaginous material found in the uniting medium. This point will be found more fully dwelt upon in the appended report.

Mr. T. HOLMES, 18th of December, 1860.

Report on the above case.—The bones were not united posteriorly by any direct connection. Anteriorly, a partly osseous material was de-

posited between the tibia and femur, forming a solid union, which, however, allowed a little obscure movement. On examination of this material it proved to be in great part cartilaginous. A very small slice only had been removed from the end of the femur, leaving remains of the articular cartilage on the front of its condyles. Small microscopic sections taken from this latter situation showed the cartilage in process of disintegration, without any trace of ossification. Between the bones, the cartilage stretched from one cut surface to the other, in the form of rounded nodules, some of them nearly as large as a pea. Of these some displayed an obscurely fibrous structure; the cartilage cells being elongated and containing numerous nuclei. In others the structure was almost identical with articular cartilage. Ossification was progressing in these cartilaginous nodules, so that lacunæ were to be found in them; and in some parts channels were seen which appeared analogous to the natural Haversian canals. Taking into consideration the situation of this deposit between the cut surfaces of the bones, its shape and thickness, and the evidences of its ossification, we conclude that it is a new formation, and that the union of the two bones is brought about by ossification in cartilage. Whether that cartilage was an independent formation, or an outgrowth from the cut surfaces of the articular cartilage, we are not prepared to decide.

Mr. T. BRYANT,

Mr. T. HOLMES,

Mr. J. W. HULKE, 18th of December, 1860.

8. *The skull, pelvis and long bones of the extremities, of an aged female dwarf.*

The subject from whom these were removed was upwards of seventy years of age, and was brought to the anatomical rooms attached to the Charing Cross Hospital. All the different parts were dwarfish, but proportionate to one another, with the exception of the head, in which the dimensions of a fully and well-formed cranium obtained. No history could be arrived at. It would appear that children had not been borne, for the hymen was intact; no *lineæ albicantes* were perceptible, and the uterus seemed to be nulliparous. During dissection, no peculiarities were found in the muscular, vascular, or nervous systems. The viscera presented nothing abnormal beyond their small size.

Diminution of stature would not appear, in this case, to be dependent upon that rickety condition which is so commonly found to prevail in those of dwarfish height, nor upon defective relative growth of the

lower limbs, or curvature of the spine; but the instance before us is that of a true dwarf, where "the proportions," as observed by Mr. Humphry,* "between the several parts of the frame are good, corresponding, or nearly corresponding with those of the normal adult; and the diminutive stature depends, accordingly, not upon the relatively imperfect growth of any particular segment, or even upon the prominence of a foetal, or childish condition. The various phases of development and growth go on, and go on correctly, but upon a small scale."

The skull, which is of adult size, weighs two pounds and two ounces. The due proportions between cranium and face are preserved; and no unusual elevation of the frontal, parietal and occipital protuberances exists, such as may sometimes be seen in rachitic cases. The larger cranial sutures are entirely obliterated. All the eminences (with the exception of those above mentioned), and depressions of cranium and face, are marked with peculiar distinctness.

The humerus is seven inches and a-half in length, and presents, with unusual distinctness, all those characteristics which distinguish this bone. The tuberosities and deltoid asperity are remarkably prominent. The nutritious foramina around the anatomical neck are very large. Two fingers can be fairly embedded in the musculo-spiral groove, whilst the external condyloid ridge is excessively prominent.

The femur is ten inches long, and shares with the humerus the peculiarity of having all its anatomical characters most pronounced. The same remark applies to the other bones laid before the Society—viz., the radius, ulna, and tibia.

The pelvis (Pl. VIII.).—The weight of this part is eight ounces and three-quarters. It is slimly constructed, and presents in a well-marked manner the great female characteristic, relatively to that distinguishing the male—viz., *breadth*; whereas, it is well known that *height* is the predominant feature in the latter sex. The sacrum is unusually flattened anteriorly.

The disproportion between the antero-posterior diameter and the transverse diameter of the brim is immense, the transverse being double that of the antero-posterior. The antero-posterior and the transverse diameters of the outlet have the usual relations to each other.

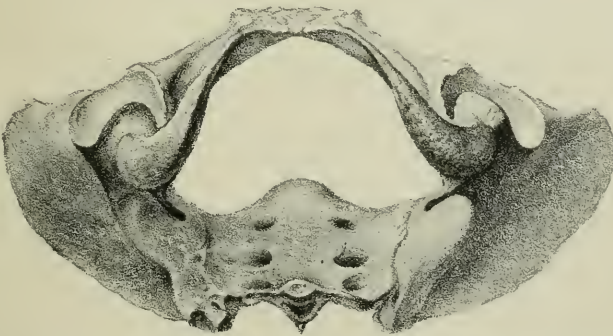
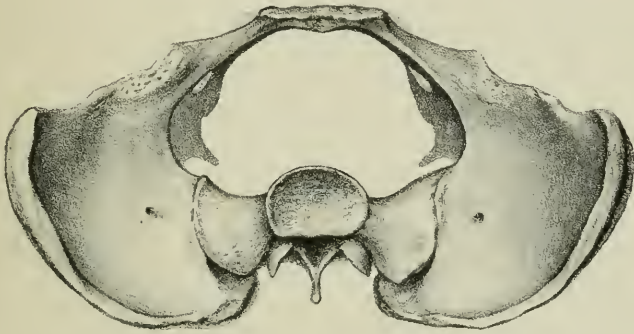
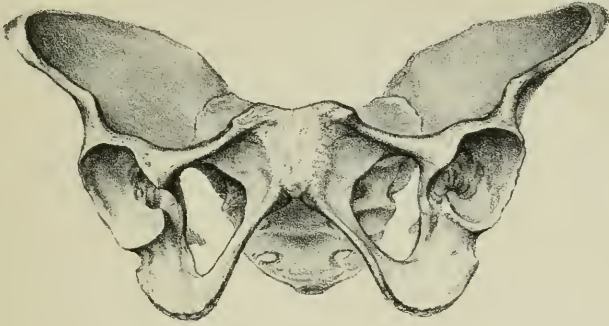
In order to have the pelvis in such a position that the transverse rami of the pubal bones shall be horizontal, the tuberosity of the right ischium must be raised about one-eighth of an inch. When thus placed, resting on the tuberosities and on the lowest part of the remaining terminal bone posteriorly, the surface of the sacral bone, which articulates with

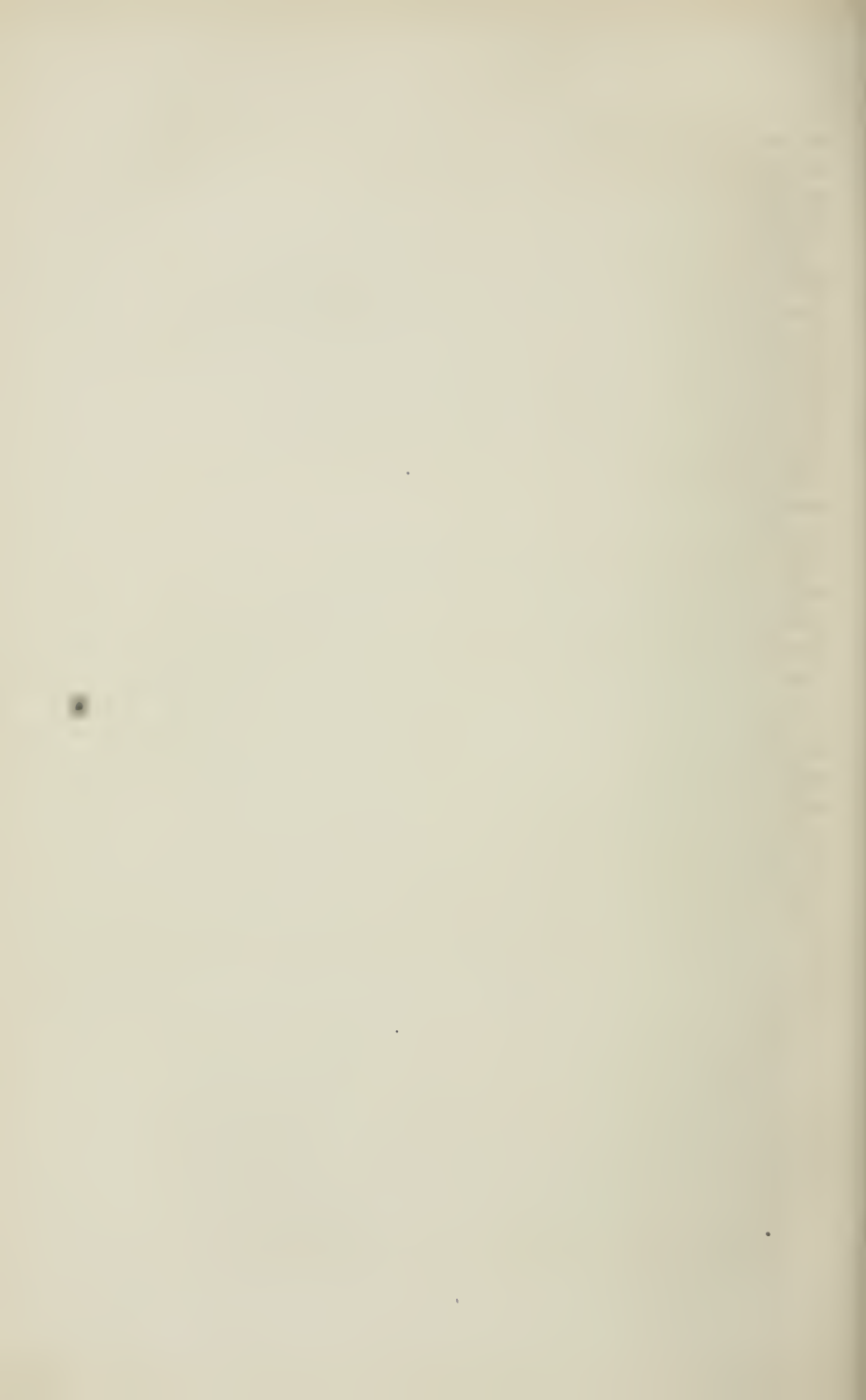
* "A Treatise on the Human Skeleton," p. 101. Cambridge, 1858.

DESCRIPTION OF PLATE VIII.

Illustrating Mr. Canton's communication on the Pelvis, &c., of a Dwarf, p. 174.

The Figures represent the anterior, the superior, and inferior aspects, respectively, of the pelvis.





the last lumbar vertebra, is not exactly in the median vertical line of the pelvis, nor exactly in the horizontal line; thus leading to the supposition that the spinal column was not quite straight, vertically.

A line drawn from the anterior and central point of the promontory of the sacrum to the centre of the upper margin of the symphysis pubis is not at a right angle with a line marking the transverse diameter of the pelvis. The space contained between this line and the brim of the pelvis on the right side is larger than the corresponding space between the line and the brim of the pelvis on the left side. A line drawn from the point of the coccyx to the lower central margin or point of the symphysis pubis is not at a right angle with a line drawn from one tuberosity of the ischium to the other, marking the transverse diameter of the outlet.

The space forming the outlet of the pelvis is slightly larger on the right side of the line marking the antero-posterior diameter of the outlet, than on the left. A vertical line descending from the lowest central point of the symphysis pubis divides the arch of the pubes into unequal segments, that on the right being larger than that on the left.

Report on the pelvis by Mr. John Wood.—There is a slight depression of the left side of the sacrum, deflecting the sacral promontory nearly half-an-inch to the left. There is, also, a slight elevation of the left pubis, which stands rather higher from the plane upon which the ischial tuberosities rest. The first result is a bending of the plane of the superior aperture, so that the pubic, or anterior part, is at an angle of 20° with the posterior or iliac portion. The contraction of the antero-posterior diameter of the brim is greater, proportionally, than that of the intercotyloid, as will be better seen by the subjoined comparative Table:—

Diameter.		Dwarf Pelvis.	Average normal Female.
Ant. post. } Transverse.... }	brim..... {	2 inches 3 lines..... 4 inches 9 lines.....	4 inches 5 lines 5 inches 2 lines
Ant. post. } (coccyx absent) }	inferior } outlet.... {	3 inches 9 lines..... 3 inches 6 lines.....	4 inches 4 inches 4 lines

Also, the contraction of the superior outlet is caused more by want of

iliac and sacral development than of pubic, as will be seen by the following comparison of the circumferential measurements:—

Round the Brim.	Dwarf Pelvis.	Average normal Female.
Width of sacrum	4 inches	5 inches
Length of iliac, or cotylo-sacral shaft	1 inch 6 lines.....	2 inches 6 lines
Length of superior pubic rami ..	2 inches 9 lines.....	3 inches 3 lines

Showing contraction of the ilia, one inch each, and of the sacrum one inch, while the contraction of the pubes is half-an-inch each, only.

This would show that the impulse of sexual development was more effective than that of development in stature. The arrest of development, most likely, occurred shortly before the period of an early puberty, as the whole pelvis is about the size of that of a child ten years of age.

The total pelvi-vertebral (or ilio-vertebral) inclination, seems to be less than normal, as far as can be judged of without the spine. The sacro-vertebral angle is, probably, more acute or less than normal, as the sacro-sciatic notch diverges widely below by the backward divergence of the sacrum. The ilio-ischial angle is rather greater than normal from the anterior displacement of the ischial tuberosities—viz., 115° , instead of 110° .

Looking at the pelvis alone, there would seem to have been a tendency to the ovate pelvis of scrofulous rickets, perhaps from starvation, or temporary interference with nutrition about the age above-mentioned, with complete recovery, as far as the bones' structure is concerned.

MR. E. CANTON, 15th of January, 1861.

9. *An excised knee-joint.*

The condyles of the femur and the patella were slightly enlarged; the bony tissue was congested, but firm, and showed no other indication of disease. The cartilage had everywhere been replaced by a soft spongy granulation—tissue, and the articular surfaces were much distorted by laminated and tuberculated bony outgrowths, and by deep erosions. The patella was firmly knit to the outer condyle of the femur by fibro-cartilage. The synovial membrane was very thick and gelatinoid.

The patient, an Irishwoman, æt. 29, was admitted into King's College Hospital on July 27th, 1860, with disease of the right knee-

joint. There was no rheumatic or other constitutional taint. Two and a-half years previously, on board ship, she fell and struck the knee, which became inflamed, but, after a few days' confinement to her berth, so far recovered that she was able to get about again, the joint remaining slightly flexed, weak, and occasionally slightly painful. Six months before she came under my care, symptoms indicating ulceration of the cartilages began. As the patient was becoming exhausted with the severity of the pain, and as the disease was not amenable to other treatment, the joint was excised on September 22nd. At the operation the absence of pus was particularly remarked, the gelatinoid state of the synovial membrane had given a deceptive sensation of fluctuation. The patient made a good recovery, and has a very useful limb.

Mr. J. W. HULKE, 15th of January, 1861.

10. *A specimen of comminuted fracture of the femur, in which the condyles had been completely separated by a vertical split which had extended into the joint.*

This preparation was taken from a patient whose thigh was amputated three months after the receipt of the injury. The man was admitted into the Great Northern Hospital, under the care of Mr. Lawson, suffering from a compound and comminuted fracture of the left femur, which apparently extended into the joint. As the patient was a young healthy man, of only 22 years of age, an attempt was made to save the limb, and for a time he progressed most favourably. For the first week after the injury, there was considerable effusion into the knee-joint; but this shortly subsided, and the joint assumed its normal size and appearance. Between the broken extremities of the shaft considerable suppuration took place. A large portion of the shaft of the femur, however, ultimately became necrosed, and the patient getting much exhausted from the continual drain, his thigh was amputated at the junction of the upper with the middle third, three months after his admission into the Hospital. The patient made a good recovery.

The injured parts presented the following appearances:—About three inches of the shaft of the femur above the fracture was necrosed, and a jagged line of demarcation separated the living from the dead bone. The condyles of the femur had been completely parted by a split which had extended into the knee-joint, and they had united by direct union, that is to say, without the intervention of any callus. On opening the joint, large florid ulcerated surfaces were seen on corresponding portions of the cartilage of the tibia and femur; but there

was not a drop of pus within the joint; thus illustrating the fact, that extensive ulceration of cartilage may take place without the formation of pus.

Fibrous union had commenced between the opposed ulcerated surfaces.

Mr. GEORGE LAWSON, 15th of January, 1861.

11. *Specimen of a comminuted simple fracture of the left patella, with partial bony union, one year after the accident.*

This preparation was taken from a patient who was admitted into the Charing Cross Hospital, under my care, with compound fracture of the left thigh-bone; he died hectic and exhausted, a year after the accident, in consequence of long-continued and profuse discharge from the wound.

The injury to the patella was not discovered until death, one year after the accident.

The fracture was a simple one; the integuments covering it presented no appearance of injury; the fibrous investment of the cutaneous surface of the patella was entire.

The form of the fracture, on the cutaneous aspect of the knee-pan, was Y-shaped. On the articular surface of the bone the fracture was much comminuted.

The broken parts were firmly united by bone, thrown out exclusively between the fractured surfaces, though not uninterruptedly, but with small intervals, which were occupied by firm fibrous tissue.

This preparation (a dried one) is in the Anatomical Museum of King's College Hospital.

Mr. R. PARTRIDGE, 19th of February, 1861.

12. *Specimen of comminuted simple fracture of the patella, recent.*

This specimen was taken from a man, æt. 42, who jumped out of a window forty feet from the ground, falling upon a stone pavement, and receiving various severe injuries, from the effects of which he died within twenty-four hours. Among the rest, there was extensive laceration of the skin and muscles of the left thigh, with a severe comminuted compound fracture of the femur. No external injury of the limb was apparent below the middle third of the thigh, except a very slight abrasion of the integuments covering the knee-pan. A comminuted fracture of the left patella was, however, distinctly perceptible by manipulation with the fingers.

By examination after death, it was found that the skin and fibrous covering of the patella were uninjured; that the form of the fracture,

on the cutaneous surface of the bone, was Y-shaped; that the fracture on its articular aspect was much comminuted; that the synovial membrane was uninjured beyond the limits of the broken patella.

There was a very slight effusion of blood under the skin to the left of the knee-pan, where the injury to the bone had been greatest.

This preparation is in the Anatomical Museum of King's College, London.

Mr. R. PARTRIDGE, 19th of February, 1861.

13. *United fracture of the cervix femoris at its junction with the shaft.*

A woman, æt. 82, was admitted into the Charing Cross Hospital under the care of Mr. Canton. She presented all the symptoms indicating the above accident. Death took place at the expiration of two months from an attack of carbuncle. The preparation showed very firm osseous union to have occurred—an interesting point in connection with the age of the patient and the period of time allowed for repair.

Mr. E. CANTON, 2nd of April, 1861.

14. *On the pathological changes produced in the shoulder-joint by traumatic dislocation, as derived from an examination of all the specimens illustrating this injury in the Museums of London.*

Last year I presented to the Royal Medical and Chirurgical Society a paper upon dislocations at the shoulder-joint, the object of which was to give a more complete account of the characters of a frequent and important injury, than had hitherto appeared in this country. The observations therein related were founded upon an examination of numerous recent cases and of specimens preserved in Museums, upon experiments on the dead subject, and upon a general comparison of the most important writings, English and foreign, bearing upon the question.

In the present communication, I propose to describe more fully than I was able to do at that time, the results of a careful examination of every available specimen which illustrates this form of injury preserved in London, as this appears to be one of the most certain methods of obtaining exact pathological information, and, at the same time, of utilising the large stores of material which are accumulating upon the shelves of our numerous Anatomical Museums, an object which falls most legitimately within the province of this Society. My apology for again bringing the subject before the profession is the very unsatisfactory nature of the information to be found upon it in most surgical works;

for the pathology of this injury has hitherto been described from isolated and often exceptional cases, and under the influence of traditional opinions, rather than from an unprejudiced appeal to any extensive series of facts.

Unfortunately, the greater number of preparations of dislocation of the humerus in our Anatomical Museums have no record of the previous history of the patient, the effects of the lesion having in most cases only been discovered after death. It is therefore of the utmost consequence, before undertaking this investigation, to determine whether the changes produced by injury, and those resulting from disease, are sufficiently characteristic in their appearance to enable us to distinguish between them.

It will assist this preliminary inquiry if we bear in mind the remarkable fact, that the shoulder is, of all the large joints of the body, the least liable to be affected by disease. According to Mr. Bryant, of 522 cases admitted into Guy's Hospital during five years, but six, or 1·14 per cent., were of the shoulder. Of 164 specimens of diseased joints in the Museum of the Royal College of Surgeons, but seven belong to the shoulder. On the other hand, it is well known that traumatic dislocations occur almost as frequently at this joint, as at all the other articulations of the body together. Furthermore, the diseases which affect the shoulder seem to differ from those of the corresponding joint of the lower extremity in the rarity with which they are followed by dislocation. I refer to *complete* dislocation, where the head of the humerus has fairly passed over the margin of the glenoid fossa. Slight alterations of position from modifications in the form of the head of the humerus and of the socket, or from changes in the surrounding ligaments and tendons, are by no means infrequent. These are the cases which have in so many instances been described as "partial dislocations" or "subluxations," of supposed traumatic origin. Although it may entail a considerable digression from the immediate object of my paper, it appears necessary, in order to arrive at a position from which we may fairly examine these preparations, to review, *seriatim*, but briefly, the diseases of the shoulder-joint, which are likely to induce such alterations as may be mistaken for the effects of external violence.

a. *Caries* need scarcely be alluded to, except to notice the fact that dislocation as a result of this disease is almost, if not quite, unknown, even after the destruction of the greater part of the head of the humerus.

b. *Hydrarthrosis*.—Luxation at the hip, from accumulation of fluid

within the capsule, being of occasional occurrence,* the same might be expected in the shoulder. There are, it is true, a few cases on record, but in none, as far as I am aware, has any *post-mortem* examination been made.

c. *Paralysis* of some of the surrounding muscles is assigned as an occasional cause of dislocation. In the few well-recorded cases, neither the glenoid fossa nor the head of the humerus was altered in shape; no new socket had been formed, only the capsular ligament had been elongated, so as to allow the bone to slip from its place, and as readily to be returned; the tendons of the capsular muscles were uninjured.†

d. *Congenital dislocations*.—The cases so called, which are reported,‡ or which I have had an opportunity of examining, appear to belong to either of two classes—1. Malformations of the glenoid cavity, the whole of which, instead of having its normal aspect, is turned more forwards or backwards, as the case may be. 2. Traumatic luxations occurring before birth, or in early infancy. To the latter division belong, apparently, several of the cases reported by Dr. R. W. Smith, which present all the characters of ordinary subcoracoid dislocations of very long standing. If this view is correct, such cases would properly come within the limits of the present investigation. Any examples which appear to have belonged to the former variety have been excluded from the table.

e. So far it will be seen that pathological dislocations, either from their extreme rarity, or well-marked characters, present no serious difficulties in the way of our inquiry. Another morbid condition of the joint remains, to which it will be necessary to devote more consideration, both on account of its comparative frequency, and because, notwithstanding the great attention devoted to it by several distinguished surgeons, its pathology, especially in relation to consecutive dislocations, is still imperfectly understood. I allude to the disease which Dr. Robert Adams, of Dublin, has so fully described under the name of “Chronic Rheumatic Arthritis.” § Specimens exhibiting the results of this affection were formerly mistaken for partial dislocations upwards, following rupture of the long tendon of the biceps from injury, and the explanation of their true origin must be regarded as a great advance in our knowledge of pathological anatomy. But it is

* See a Paper by Mr. Stanley, “Med.-Chir. Trans.,” Vol. xxiv.

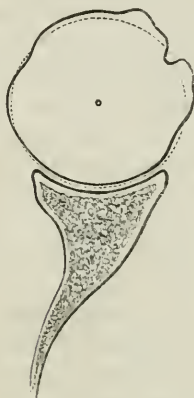
† See Malgaigne, “Traité des Fractures et des Luxations,” 1855, Tome ii. p. 559.

‡ R. W. Smith, “Treatise on Fractures and Dislocations,” p. 256. R. Adams, “Cyclop. of Anat. and Phys.,” Art. “Abnormal Conditions of the Shoulder-joint.”

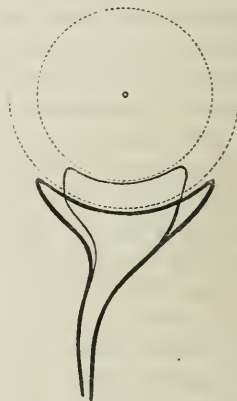
§ Treatise on Rheumatic Gout, 1857.

necessary to observe, that in all the cases described by the chief historian of the disease, and by Dr. R. W. Smith,* in which the affection was recognized during life, there has been nothing like real dislocation. The original socket for the head of the humerus has gradually enlarged (Woodcut 19), its shape is changed, new osseous parts, viz., the under

WOODCUT 18.



WOODCUT 19.



Woodcut 18. Represents in diagram the normal condition of the parts in a horizontal section of the glenoid fossa, and head of the humerus; this figure is introduced to facilitate comparison with the three following, which represent pathological alterations in the parts.

Woodcut 19. Section showing the effects of chronic rheumatic arthritis; glenoid fossa enlarged.

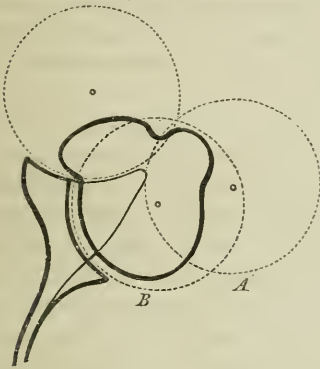
surface of the acromion, the outer end of the clavicle, and the outer and under sides of the coracoid process, enter into its formation, but it is the old socket still. In true dislocations that have been long unreduced, there is always a new socket, as well as the old (Woodcuts 20, 21), both forming cup-shaped cavities, portions of the circumference of imaginary spheres, the centres of which are quite distinct from each other; the new superadded socket being either quite external to the old one, or encroaching more or less upon it, in very long-standing cases so far as almost to cause its obliteration.

This distinction is very important, and does not seem to have received sufficient attention, either from Dr. Adams or Dr. Smith, in their examination of the following case, and of several others of like nature quoted in their works. Referring to the well-known specimen, figured

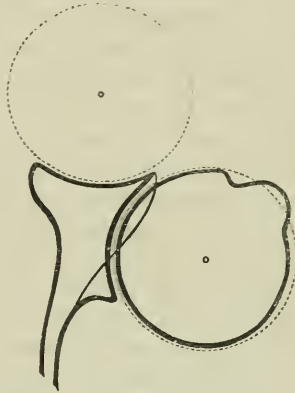
* "Dublin Quarterly Journal of Medical Science," Feb., 1853. See also E. Canton, "Lond. Med. Gazette," 1849, Vol. viii., p. 958.

and described by Sir A. Cooper,* as an example of "partial dislocation," Dr. Adams says, the appearances observed "were exactly those most frequently found to be the result of chronic rheumatic arthritis, as it affects the shoulder-joint." And, by way of illustrating this view, he has placed side by side, in one plate, a copy of the figure of Sir A. Cooper's

WOODCUT 20.



WOODCUT 21.



Woodcut 20. Subcoracoid dislocation, first variety. The circle, A, shows the position of the head of the humerus in recent dislocations; B, the same when left long unreduced, the new socket encroaching upon the glenoid fossa, the head of the humerus grooved by the pressure of the ridge between the old and new socket. Specimens in this condition have generally, but incorrectly, been described as "partial dislocations."

Woodcut 21. Subcoracoid dislocation, second variety (*intra-coracoid* of Malgaigne). New socket on front of neck of scapula, not encroaching on glenoid fossa; no grooving of the head of the humerus, but the greater tuberosity partially worn away.

case, and another of an undoubted case of chronic rheumatic arthritis, observing that "all who carefully read the account of the dissection of the two cases, and compare the two engravings, must admit, that whatever circumstances influenced the production of the morbid appearances in the one, were identical with those which produced them in the other."

It seems to me, although dissenting with diffidence from the opinion of so distinguished a pathologist, that the two cases differ from each other in this most essential particular. In the one there has been dislocation; in the other there has not. In the one the head of the humerus has been lodged, and has formed for itself a new socket "on the anterior part of the

* "A Treatise on Dislocations and Fractures of the Joints," Ed. 1842, p. 362.

neck of the scapula," "under the coracoid process;" in the other the old socket is enlarged *upwards*, and the head of the humerus is situated immediately beneath the acromion, altogether on the outer side of the coracoid process. In fact, one is a characteristic example of unreduced subcoracoid dislocation, the other of the ordinary course of chronic rheumatic arthritis. If a satisfactory claim were established for the disease, as the cause of the changes in the first case, the greater number of supposed specimens of traumatic dislocations in our Museums must be placed in the same category, and the attempt to illustrate the pathological history of an injury from them, would be rendered useless; but to this I am not inclined to accede.

We undoubtedly meet with many cases, in which, in conjunction with characters of true dislocation, are found appearances, such as abundant osseous growth about the joint, expansion of the head of the humerus, fimbriated and pedunculated bodies lining the synovial membrane, &c., which are significant of the presence of chronic rheumatic arthritis. The question naturally arises, whether the dislocation was antecedent to, or consequent upon, the disease. It is well known that any injury to a joint, even a slight blow or sprain, is often the exciting cause of this affection in persons predisposed to its attacks; it is, therefore, quite reasonable to suppose that so serious a lesion as an unreduced dislocation, will produce the same effect. This is the history, I think, of most of these cases. On the other hand, it is not improbable, that a dislocation from external violence might occur during the progress of already-existing arthritis. If the disease were so far advanced as to have destroyed the long head of the biceps, or to have separated the connection of some of the other tendons from the humerus, a very slight degree of force would suffice to dislocate it.

Now remains the very important question:—Does the disease called chronic rheumatic arthritis ever lead to such changes in the articulation, as may of themselves produce true dislocation without external agency?

This is a question which Dr. Adams answers in the affirmative, bringing forward examples which he considers to be dislocations from this cause, both in the downward and forward directions; but in not one of these is there any proof whatever of the dislocation being solely the result of the disease; the specimens are all without history, and the appearances are in every case quite consistent with the supposition of a traumatic dislocation to which chronic rheumatic arthritis has been superadded; while in all the cases adduced in which the disease has been recognized and carefully observed during life, the humerus is not,

properly speaking, dislocated, but has only ascended to the under surface of the acromion, the course which the unopposed action of the deltoid, coraco-brachialis, and biceps muscles, would naturally incline it to take.

Without denying the possibility of subcoracoid, or even subglenoid dislocation, as the direct effect of the disease in question, I only say, that as yet, we have no proof of its occurrence. If hereafter it should be established, it will be a new and most important feature in the history of the affection.

In specimen No. 12 of the Table, I think it not improbable that the disease existed prior to the dislocation. This opinion is founded partly on the appearances exhibited in the preparation, especially the apparent destruction of the intra-capsular portion of the long tendon of the biceps, and partly on the fact that in one of the knees of the same subject, the patella is dislocated outwards, a common result, according to Dr. Adams, of rheumatic arthritis when it affects this joint. Granted that the disease existed previously, whether the final dislocation was traumatic, or of purely pathological character, is, in the absence of history, still an open question. I have retained it in the Table, but mention it here as presenting, more nearly than any that I have examined, the characters which we might expect to find in a true subcoracoid dislocation produced by the effects of chronic rheumatic arthritis.

The present state of our knowledge would lead us then to infer that any dislocation which is complete, is *probably* of traumatic origin; I have therefore included in the table all examples of this kind, which furnish, either in their present condition, or through the record of the dissection, sufficient evidence to determine the exact position of the head of the humerus. They are forty-one in number. Some specimens, of doubtful nature, or which supply no satisfactory information, have necessarily been omitted. My best thanks are due to the curators of the different Museums, for their courtesy in affording every facility for examining the preparations under their charge.

The results of the examination of these specimens may be stated as follows:—

1. As to the situation in which the head of the humerus is lodged. The evidence of this may generally be obtained, even when the scapula is alone preserved, by the presence of the new socket. In thirty-two examples it is placed upon the anterior margin of the glenoid fossa, or neck of the scapula, *immediately beneath* the coracoid process.

The following deviations from this position are met with:—In two

examples (Nos. 6 and 38), it is found somewhat lower down, the new socket being formed partly at the expense of the lower and anterior portion of the glenoid fossa, and partly on the anterior edge of the inferior costa of the scapula, the upper part of the head of the humerus being at a distance of somewhat less than an inch below the coracoid process. In one specimen (No. 23), the position is intermediate between this and the first-mentioned form. In no case is the head of the humerus placed entirely below the glenoid cavity. One of the above-mentioned specimens (No. 38) is figured by Sir A. Cooper, and reproduced by several subsequent authors as a typical example of the ordinary form of dislocation, whereas more extended observations show that it is an exceptional case. There are four examples of the very well-marked variety of dislocation *backwards* (Nos. 7, 10, 16, and 28), in which the head of the bone is placed upon the posterior edge of the glenoid fossa, or the neck of the scapula, immediately beneath the posterior part of the acromion process.

In one (No. 18) the head of the humerus was thrown upwards and inwards, and rested upon the stump of the fractured coracoid process. In No. 11, it is said to have been "found resting on the subscapular fossa, and immediately below the clavicle;" but it has unfortunately been removed from this situation in putting up the preparation. In several other specimens, in which the head of the bone is described in the catalogue as being "under the clavicle," the new socket is distinctly seen in the preparations to be immediately below the coracoid process. So that there is no specimen really illustrating the "subclavicular" variety, as defined by Sir A. Cooper,* which is said by some authors to be second in order of frequency.

2. As to the injury inflicted upon the tendons or muscles around the joint. From many of the specimens no information can be obtained upon this point. But from those in which these parts are preserved, the following inferences may be derived:—The long tendon of the biceps retains its connection with the scapula, and is itself uninjured, except in the very anomalous case No. 18, and in two others (Nos. 12 and 20) where its destruction appears to have been rather the result of inflammatory action than of violence. The tendons attached to the great tuberosity are more frequently ruptured, or the tuberosity itself detached from the rest of the bone. These injuries have occurred in at least five cases.

3. The anatomical characters of the most common form of dislocation are well illustrated in many of the more recent examples, and may be summed up as follows:—The head of the humerus lies on the anterior surface of

* "The head of the os humeri placed below the middle of the clavicle, and on the sternal side of the coracoid process."

the neck of the scapula, immediately below the coracoid process, in front, internal to, and rather lower than its normal position. That part of the anatomical neck, which separates the articular surface from the great tuberosity, rests upon the anterior edge of the glenoid fossa. The subscapular muscle is raised from the neck of the scapula, and stretched over the front of, or above the head of the humerus. The muscles, from the back of the scapula (supra-spinatus, infra-spinatus, and teres minor), are drawn tightly across the glenoid fossa, or one or more of them may be ruptured or detached from the bone. A portion, or the whole of the greater tuberosity is frequently separated, when it may be drawn into the glenoid fossa by the action of the muscles inserted into it, or may be retained in connection with the humerus by the periosteum or the capsular ligament. The long tendon of the biceps is rarely, if ever, injured. The muscles that descend from the coracoid process to the humerus are stretched by the projection of the head of the bone forwards, and the great vessels and nerves are displaced inwards. Lastly, the capsule is lacerated more or less extensively, anteriorly and inferiorly, the upper end of the bone having escaped through the aperture.

4. The changes which take place in the contiguous extremities of the two bones in the ordinary forms of dislocation when left long unreduced, can be well studied in these specimens, and deserve more attention than has hitherto been paid to them, as they have frequently been mistaken for evidences of the existence of partial, or pathological luxations. A new shallow socket is formed upon the anterior surface of the neck of the scapula, partly by absorption of old, and partly by deposit of new bone around its edge. The exact position of this socket varies according to the degree of displacement of the humerus; in the first variety (*subcoracoid* of Malgaigne), the new cavity is formed more or less at the expense of the anterior portion of the glenoid fossa (Woodcut 20) which is gradually worn away, so that in some cases the original socket is finally almost altogether lost. A corresponding change takes place in the head of the humerus. Where it rests upon the edge of the glenoid fossa, absorption occurs, so that a groove is excavated, usually between the articular head and the great tuberosity. With continued friction this goes on increasing in size simultaneously with the changes in the scapula, the two accommodate themselves to each other, and ultimately the head of the latter bone presents a double articular surface, separated by a vertical ridge; the posterior portion being part of the old glenoid cavity, the anterior, the newly-formed socket. These respectively articulate with the two sides of a wide groove placed vertically on the head of the humerus; and a rude kind of joint, allowing of a certain amount of motion, is the result. At the

same time it will be observed, that by the absorption that has taken place in both bones the head of the humerus has made considerable progress towards regaining the position it occupied before the injury, and therefore, the external signs of dislocation become to some extent removed. The under surface of the coracoid process, especially near its tip, is almost always found smooth and eburnated, having entered into the formation of the new articulation.

If the head of the humerus is placed further under the coracoid process (*intra-coracoid* of Malgaigne) the new socket is formed upon the neck of the scapula, quite outside the glenoid fossa, upon which it does not encroach (Woodcut 21). It is then a simple cup-shaped depression, and the head of the humerus undergoes none of the changes above described, but is generally worn away on the side of the greater tuberosity by friction against the anterior edge of the glenoid fossa, and hence assumes a somewhat oval shape. In these cases the coracoid process is not usually a part of the new articulation. All intermediate varieties are found between the two extremes. The position of the new socket, quite free from, or more or less encroaching upon, the glenoid fossa; the head of the humerus unaltered, flattened on its outer side, or grooved, being circumstances which all depend upon the exact situation in which the bone has found its new lodgment. The osseous surfaces, which are in contact, are, in long-standing cases, generally divested of cartilage, and in places hard and polished.

It would be of much practical interest to determine the length of time required to effect these changes, but for this purpose, there are scarcely any data. Probably, it varies in different individuals, and under different circumstances. In one specimen (No. 17), in which the accident is said to have occurred three months before death, absorption of the anterior edge of the glenoid fossa has already commenced, and some bone is deposited in the margin of the new socket. In another (No. 8), in which the humerus had been dislocated for eighteen months, there is a distinct fibrous socket on the front of the neck of the scapula, but as the preparation is in spirit, it cannot be ascertained, whether any alterations have taken place in the bones.*

* As the great frequency of subcoracoid dislocation observed in this series does not accord with the descriptions of this injury generally given in the standard surgical works of this country, and might lead to the supposition, that in these examples of neglected dislocation, the head of the humerus had in process of time assumed a position which did not at first belong to it, I should mention, that in upwards of fifty cases recently observed in living patients, in a very large majority it could be distinctly felt immediately below the coracoid process, and that this has already been recognized as the typical position by most surgeons of the modern French school.

Tabular statement of the Specimens of Complete Dislocation of the Humerus preserved in the Anatomical Museums of London, showing the principal Pathological Changes which have been produced by the Injury.

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
1	Royal College of Surgeons.	872	Unreduced dislocation of left humerus.	In spirit.	None. Liston's Museum.	Between neck of scapula and subscapularis muscle, immediately below coracoid process.	Somewhat enlarged, and flattened transversely; apparently not grooved.	Fibrous socket upon front of neck of scapula, quite distinct from glenoid cavity.	Tendons uninjured. Some fimbriated and pedunculated growths upon the lining membrane of the new cavity.	<i>Subcoracoid.</i>
2	Ditto.	873	Unreduced dislocation of right humerus.	Dried bones.	None. Liston's Museum.	Immediately below coracoid process.	Deeply grooved between articular surface, and great tuberosity, around which new bone has been thrown out.	New socket, with elevated bony margins, on front of neck of scapula; surface of bone around roughened by osseous deposits.	..	<i>Subcoracoid.</i>
3	Ditto.	874	Unreduced dislocation of left humerus.	In spirit.	None. Hunterian.	Immediately below coracoid process.	Somewhat flattened and grooved on its outer side.	Partly osseous and partly ligamentous. Under surface of coracoid process articular.	Long tendon of biceps entire. Greater tuberosity appears to have been fractured.	<i>Subcoracoid.</i>

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
4	Royal College of Surgeons.	3273	Unreduced dislocation of left humerus.	Dried bones.	None. Hunterian.	Just below the coracoid process, the tip of which points to the bicipital groove.	Grooved between articular surface, and great tuberosity; much new bone thrown out around this prominence.	A distinct socket formed below the root of the coracoid process, nearly on a level with the glenoid fossa, the anterior margin of which is only slightly encroached upon.	..	<i>Subcoracoid.</i>
5	Ditto.	3274	Unreduced dislocation of right humerus.	Dried bones.	None. Liston's Museum.	Immediately below coracoid process.	Not much altered in form; grooved near its outer side. Rotated outwards.	New socket formed upon the anterior margin of the glenoid fossa, which is much worn away. Little development of new bone.	..	<i>Subcoracoid</i>
6	Ditto.	3275	Unreduced dislocation of right humerus.	Dried bones.	None. Howship's Museum.	About an inch below coracoid process.	Expanded and much flattened; a considerable growth of bone from the greater tuberosity.	A deep socket, with elevated bony margins below, and in front of, but somewhat encroaching upon the glenoid fossa.	..	<i>Subglenoid.</i>
7	Ditto.	3276	Unreduced dislocation of right humerus.	Dried bones & ligaments.	None. Sir Astley Cooper.	Under posterior edge of the acromion. Rotated very much outwards.	Flattened where it rests upon the posterior margin of the glenoid fossa.	Not well seen in the preparation.	Long tendon of the biceps preserved apparently uninjured.	<i>Subspinous.</i>

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
8	St. Bartholomew's Hospital.	3-42	Unreduced dislocation of right humerus.	In spirit.	The dislocation occurred 18 months before death, and was followed by paralysis of the deltoid muscle.	Immediately under, and rather internal to, the coracoid process.	..	A fibrous socket on front of neck of scapula, beneath the subscapularismuscle.	No tendons ruptured. The circumflex nerve pressed upon by the head of the humerus.	<i>Subcoracoid.</i>
9	Ditto.	3-47	Unreduced dislocation of right humerus, with fracture of the shaft.	In spirit.	Known history of dislocation.	It has now fallen from the position it originally occupied — <i>i.e.</i> , immediately under the coracoid process, between the neck of the scapula and the subscapularis muscle.	Apparently unaltered.	A fibrous socket on front of neck of scapula.	Long tendon of biceps onire; also the tendons inserted into the tuberosities of the humerus.	<i>Subcoracoid.</i>
10	Ditto.	3-53	Unreduced dislocation backwards of right humerus.	In spirit.	None.	Rests against the posterior border of the glenoid cavity, in contact with the under surface of the acromion.	Unaltered in form, and covered with its cartilage.	..	“The tendons of the supra - spinatus and infra - spinatus are detached from the tuberosities of the humerus, but retain their connection with the capsule. The tendon of the biceps is displaced from its groove in the humer-	<i>Subspinous</i> , called “incomplete” in the Catalogue.

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
11	St. Bartholomew's Hospital.	355	Recent dislocation of humerus.	In spirit.	Dislocation occurred a fortnight before death.	Not shown in the preparation. Said to have been "found resting on the subscapular fossa, and immediately below the clavicle."	Not changed.	None.	<p>us, but retains its attachment to the glenoid cavity. The tendons of the teres minor and subscapularis retain their attachments to the humerus."</p> <p>"The tendon of the biceps retains its connection with the margin of the glenoid cavity. The tendons of the supra-spinatus and infra-spinatus are detached from the humerus, but retain their connection with the capsule. The tendons of the teres major and subscapularis retain their attachment to the humerus. There is a large lacerated aperture in the capsule."</p>	<i>Subclavicular?</i>
12	Ditto.	3112	Unreduced dislocation of right humerus.	In spirit.	None. Dissecting-room subject.	Immediately below, and in contact with, the coracoid process.	..	Fibrous.	<p>The intra-capsular portion of the long tendon of the biceps appears to have been destroyed.</p>	<i>Subcoracoid,</i> associated with chronic rheumatic arthritis. The patella of

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
13	St. Bartholomew's Hospital.	3-118	Unreduced dislocation of right humerus.	In spirit.	None.	Immediately below coracoid process.	Slightly grooved near its outer side.	On the anterior surface of the neck of the scapula, formed partly at the expense of the glenoid fossa.	The tendons of the biceps, supra-spinatus, infra-spinatus, teres minor, and subscapularis all retain their attachments.	the same side dislocated outwards. <i>Subcoracoid.</i>
14	Ditto.	C. 27	Unreduced dislocation of right humerus.	Dried bones.	None.	Immediately below coracoid process.	Grooved near its outer side.	On anterior edge of glenoid fossa, part of which is destroyed.	..	<i>Subcoracoid.</i>
15	Ditto.	C. 34	Unreduced dislocation of right humerus.	Dried bones.	None.	Exactly as the last.	Ditto.	Ditto.	..	<i>Subcoracoid.</i>
16	Ditto.	C. 79	Unreduced dislocation of humerus.	Dried bones.	None.	On posterior edge of glenoid fossa, beneath acromion.	Grooved. Rotated very much inwards.	..	..	<i>Subspinous.</i>
17	Ditto.	C. 103	Unreduced dislocation of humerus, with fracture of	Dried bones.	Patient upwards of 50. Accident occurred three	Immediately below coracoid process.	Unaltered. Fibrous union with shaft.	On front of neck of scapula, absorption commencing in anterior edge of glenoid fossa. Recent depo-	..	<i>Subcoracoid.</i>

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
18	St. George's Hospital.	..	the anatomical neck.	In spirit.	Fell from a height and dislocated the arm, fourteen days before death.	Resting on the fractured coracoid process, above and internal to, the glenoid fossa.	Cartilage partly abraded by contact with the fractured surface of the coracoid process.	None formed.	Long tendon of the biceps displaced and partially torn. Supra- and infra-spinatus torn through.	<i>Supracoracoid.</i> See Paper by Mr. Holmes, "Med. - Chir. Trans.," Vol. XLI., p. 447.
19	Guy's Hospital.	1297-25	Unreduced dislocation of left humerus.	Dried bones.	None.	In front of, and rather lower than, the glenoid fossa; below coracoid process.	Much enlarged; flattened on its inner side, where it articulates with the scapula.	A raised flat surface on front of neck of scapula, close to glenoid fossa, formed entirely by deposition of new bone; the surface spongy.	..	<i>Subcoracoid.</i> associated with chronic rheumatic arthritis.
20	Ditto.	1297-50	Unreduced dislocation of right humerus.	Dried with the tendons.	None.	Immediately below the coracoid process.	Slightly grooved between articular surface, and great tuberosity.	Upon neck of scapula in front of glenoid fossa. Under surface of coracoid process articular.	Tendon of biceps entire.	<i>Subcoracoid.</i>
21	Ditto.	1298-50	Unreduced dislocation of right humerus.	Dried with the muscles.	None.	Immediately below, and in contact with, the coracoid process, the tip of which corresponds with the bicipital groove.	Apparently not much changed.	New socket in process of formation in front of glenoid cavity.	Intra-capsular portion of long tendon of biceps absorbed?	<i>Subcoracoid.</i>

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
22	Guy's Hospital.	1298-55	Unreduced dislocation of right humerus.	Bones dried <i>in situ</i> with ligaments.	Patient aged 29. Dislocation said to have existed five years.	Immediately below, and articulating with the coracoid process.	Slightly grooved between articular surface, and great tuberosity.	On front of neck of scapula, below coracoid process.	Apparently uninjured.	<i>Subcoracoid.</i>
23	King's College.	1342	Unreduced dislocation of right humerus.	Dried bones.	None.	In front of, and rather below, glenoid fossa. Perhaps an inch below coracoid process.	Depressed, and deeply grooved between head, and great tuberosity.	New bony socket formed on the anterior and lower margin of the glenoid fossa.	..	Intermediate between <i>subcoracoid</i> and <i>subglenoid.</i>
24	Ditto.	1343	Unreduced dislocation of left humerus.	Dried bones.	None.	Immediately below coracoid process.	Grooved between head, and great tuberosity.	On front of neck of scapula. Under surface of coracoid process articular.	..	<i>Subcoracoid.</i>
25	London Hospital.	..	Right scapula and humerus of a patient subject to repeated dislocations.	Dried bones.	Had been dislocated and reduced about fifteen times.	Beneath coracoid process.	The outer fifth worn away.	Very shallow socket, formed chiefly by absorption of anterior lip of glenoid fossa. No deposit of new bone.	Tendons uninjured.	<i>Subcoracoid.</i> See Paper by Mr. Curling, "Med. - Chir. Trans.," Vol. XX., p. 338.
26	Ditto.	F. a. 1.	Unreduced dislocation of right humerus.	In spirit.	Dislocation occurred nine years before death.	Immediately below, and rather to the inner side of, the coracoid process.	Appears irregular and misshapen.	Not well seen in the preparation.	..	<i>Subcoracoid.</i>

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks
27	London Hospital.	F. a. 2.	Unreduced dislocation of right humerus.	In spirit.	None.	Immediately below the coracoid process, between the neck of the scapula and subscapularis muscle.	Deeply grooved at its outer side, and apparently expanded. Covered with cartilage.	Partly osseous, and partly fibrous; on front of neck of scapula, immediately below, and rather to the inner side of the coracoid process. Proliferated growths from the interior of the joint.	Long tendon of the biceps entire. All the others apparently in the same condition.	<i>Subcoracoid.</i>
28	St. Mary's Hospital.	A. a. 8.	Unreduced dislocation of right humerus.	Dried bones.	None.	On posterior aspect of neck of scapula.	Partially absorbed, from pressure against edge of glenoid fossa. Small tuberosity appears to have been broken off.	Entirely behind the glenoid fossa; much new bone thrown out around it.	..	<i>Subspinous.</i>
29	Middlesex Hospital.	I. 19. a.	Unreduced dislocation of right humerus.	Dried bones.	None.	Immediately below coracoid process.	Expanded, and deeply grooved.	Immediately below coracoid process (the under surface of which enters into the new articulation), & encroaching upon the glenoid fossa. Much new bone deposited round its edges. One distinct rounded nodule in the capsular ligament. Surface not eburnated, but spongy.	The long tendon of the biceps is preserved apparently uninjured.	<i>Subcoracoid.</i>

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
30	Middlesex Hospital.	I. 19 b.	Unreduced dislocation of right humerus.	Dried bones.	None.	Immediately below coracoid process.	Deeply grooved on its outer side.	On the front of the neck of the scapula. The anterior margin of the glenoid fossa scarcely encroached upon. A small detached plate of new bone in the capsule on the inner edge of the socket.	..	<i>Subcoracoid.</i>
31	Ditto.	I. 19 c.	Unreduced dislocation of right humerus.	Dried bones.	None.	Immediately below coracoid process.	Expanded and flattened, not grooved, but worn away on the outer side. Articular surface eburnated.	On neck of scapula, almost free of the glenoid fossa, which is filled with deposit of new bone. Surface of new socket hard and polished, and increased by deposit of new bone around it. Coracoid process much enlarged by plates of new bone, the under surface of which are polished and articular.	..	<i>Subcoracoid.</i>
32	St. Thomas's Hospital.	B. 4.	Unreduced dislocation of right humerus.	In spirit.	None.	Immediately below, and rather internal to, coracoid process.	Much expanded. Worn away at the side.	On front of neck of scapula, partly osseous and partly fibrous. Under surface of coracoid process not articular, except, perhaps, at the root.	Long tendon of the biceps entire, retaining its place in the groove.	<i>Subcoracoid.</i>

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
33	St. Thomas's Hospital.	B. 6.	Unreduced dislocation of right humerus.	In spirit.	History of injury many years before death, but good use of the arm afterwards.	Immediately under coracoid process.	Apparently somewhat grooved on its outer side.	On front of neck of scapula, directly under coracoid process.	Long tendon of the biceps entire, and retained in the groove.	<i>Subcoracoid.</i>
34	Ditto.	B. 7.	Unreduced dislocation of left humerus.	In spirit.	None.	About half-an-inch below coracoid process.	Articular head entire, and covered with cartilage. Part of greater tuberosity apparently worn away.	New fibrous socket between neck of scapula and subscapularis muscle, which is spread over it.	Long tendon of the biceps entire. The other tendons apparently uninjured.	<i>Subcoracoid.</i>
35	Ditto.	B. 8.	Rather recent unreduced dislocation of left humerus.	In spirit.	None.	Immediately beneath coracoid process.	Apparently unchanged.	Fibrous socket in front of neck of scapula.	Apparently uninjured.	<i>Subcoracoid.</i>
36	Ditto.	B. 9.	Unreduced dislocation and fracture of neck of right humerus.	Dried.	Fall on shoulder from horse's back many years before death.	On front of neck of scapula, immediately below coracoid process.	Fracture at the anatomical neck, where a false joint has formed. Head ankylosed to neck of scapula and tip of coracoid process.	..	..	<i>Subcoracoid.</i>

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
37	St. Thomas's Hospital.	B. 10.	Rather recent unreduced dislocation of left humerus.	In spirit.	None.	Immediately under the coracoid process.	Slightly grooved between head and greater tuberosity.	Fibrous socket on front of neck of scapula. Glenoid cavity retains its articular cartilage.	Supra-spinatus ruptured. The long tendon of the biceps has been divided, apparently in the dissection.	<i>Subcoracoid.</i>
38	Ditto.	B. 11.	Portion of left scapula. Old unreduced dislocation of humerus.	Dried.	None.	Below, and in front of glenoid cavity. The top must have been fully an inch below the coracoid process.	..	A new bony socket formed on the inner edge of the interior costa of the scapula; rather more than half of it situated below the level of the glenoid fossa, the margin of which is entire.	..	<i>Subglenoid.</i> Figured in Sir A. Cooper's work.
39	Ditto.	B. 12.	Recent partial dislocation of humerus, with fracture of coracoid process, acromion, & clavicle.	In spirit.	Patient aged 58; fell from a scaffold.	On anterior margin of glenoid fossa, between neck of scapula and subscapularis muscle.	Unchanged.	None formed.	Coracoid process fractured. No tendons ruptured.	<i>Incomplete subcoracoid.</i> Reported by Mr. South, "Med. & Chir. Trans.," Vol. XXII.
40	University College.	..	Recent dislocation of humerus.	Dried.	Dislocation occurred 18 days before death. Not reduced.	"Lodged on the inside of the neck of the scapula, at the root of the coracoid process,	Unchanged.	A new capsule appears to be in the process of formation.	Portion of the greater tuberosity into which the supra- and infra-spinatus muscles are attached,	<i>Subcoracoid.</i> Reported by Mr. Thompson, "Med. Obs. & Inq.,"

No.	Museum.	No. in Catalogue	Nature of Specimen.	State of Specimen.	History.	Situation of Head of Humerus.	Condition of Head of Humerus.	Condition of New Socket.	Condition of Tendons, Ligaments, &c.	Remarks.
41	Seaman's Hospital, "Dreadnought."	..	Unreduced dislocation of left humerus.	Dried bones.	..	Immediately below, and articulating with, coracoid process.	Much worn away posteriorly, but not grooved. Articular surface eburnated. New bone thrown out round it.	New bony socket formed on anterior margin of glenoid fossa, which is not much encroached upon. Under surface of coracoid process expanded and articular.	torn off. Tendons of subscapularis and teres minor partly ruptured; biceps uninjured. Capsular ligament completely torn from whole circumference of the neck of the humerus.	Vol. II., p. 340, 1762. The foregoing particulars chiefly taken from the published report, as they are not now well seen. <i>Subcoracoid.*</i>

* For explanation of the terms used above in defining the varieties of dislocation of the humerus, see Holmes's "System of Surgery," *art. Injuries of the Upper Extremity*, Vol. II., p. 565, *et seq.*

Mr. W. H. Flower, 7th of May 1861.

VII. DISEASES, ETC., OF THE ORGANS OF SPECIAL SENSE.

1. *Ulceration of the fibrous lamina of the membrana tympani.*

Mr. Hinton showed the petrous bones of a man, æt. 48, who had been extremely deaf for many years, and died of disease of the liver in Guy's Hospital. The cavity of the tympanum on each side was obliterated by a falling in of the membrana tympani from ulceration of its fibrous laminae. The internal parts were unaltered.

Mr. J. HINTON, 6th of November, 1860.

2. *Bony degeneration of the contents of an eyeball.*

F. I., æt. 16, applied at the South London Ophthalmic Hospital, December 8th, 1860. The right eye had been lost ten years previously from traumatic inflammation, which left an atrophied, squared stump. This had ever since given her at intervals considerable pain, and recently the sight of the left eye had begun to fail her. In this latter the ophthalmoscope disclosed a general dimness of the fundus oculi, and an indistinctness of outline of the optic papilla. Under these circumstances I, on December 15th, removed the right globe by Bonnet's method.

The cornea was shrunken and opaque. On dividing the eyeball this was found to be nearly filled by a bony growth, covered by atrophied choroid and a thin, transparent membrane (the retina?). The growth was rough externally, from projecting spicula, quite of the same character as those so constantly seen in serofulous joints, medullary tumours, &c. A section of the growth was twelve millimetres from before backwards, nine millimetres from above downwards, and presented an irregularly loculated structure of partly soft, partly bony, consistence.

Mr. J. ZACHARIAH LAURENCE, 1st of January, 1861.

Report on above case.—On making a section of the tumour, the greater part of its interior was found composed of a tough, irregularly loculated texture, some of the loculi of which contained a brown, pul-taceous, soft matter (fat globules and cholesterine plates). Surrounding the softer parts was a shell of hard, compact, bony tissue, which under the microscope displayed all the characteristics of normal bone—haversian canals, bone corpuscles concentrically arranged around these, with canaliculi. The tough, loculated texture, alluded to above, possessed also a bony structure, and was, therefore, probably bone of a less

compact structure, which had been softened by the lengthened maceration of the preparation. Mr. Z. LAURENCE, 5th of February, 1861.

VIII. TUMOURS, CYSTS, ETC.

1. *Epithelial cancer of the lower jaw, for which one-half of that bone was excised.*

J. B., æt. 49, a short, stout, healthy-looking man, was admitted into the Great Northern Hospital, under the care of Mr. Wm. Adams, September 20th, 1860, suffering from a tumour of the lower jaw on the right side, evidently connected with the bone at the angle of the jaw, and involving part of the horizontal ramus. Externally, the swelling was very considerable in the direction of the bone and towards the cheek. The skin was slightly reddened, and the integuments hard and brawny, evidently from inflammatory infiltration. This induration extended a little on to the neck, but the glands did not appear to be much enlarged. Internally, when the mouth was opened, which could only be done with difficulty, considerable enlargement could be seen; at the back part this evidently depended upon a growth from the angle of the bone, of a soft, fleshy-looking character projecting upwards and backwards, and closely adapted to the right half of the soft palate; anteriorly, this internal enlargement presented only the characters of a common abscess. It had been freely opened by Mr. Wallis, the House-Surgeon, the day before the man's admission, and about an ounce of healthy pus let out. When first seen by Mr. Adams, on the 19th of September, this abscess was discharging freely into the mouth, and appeared to have a considerable cavity, as ascertained by passing a probe into it.

Mr. Adams considered that much of the general enlargement and induration of the integuments depended upon inflammatory infiltration, probably caused by necrosed bone, though this could not be distinctly felt; and, from the combination of abscess with the morbid growth, took a comparatively favourable view of the case, as opposed to the idea of the malignant or cancerous nature of the growth.

History of the tumour.—The man stated that between three and four months previously he first perceived a small painful swelling resembling a gum-boil, near to the angle of the jaw. At first he took but little notice of it, but in two or three weeks it increased in size, became very painful, and caused great inconvenience to the movements of the jaw.

He then applied to the Royal Free Hospital, and was attended as an out-patient. The mouth could only be partially opened, and with much pain; two of the molar teeth on the affected side being loose were extracted by the House-Surgeon, who states that at this time the tumour was almost the size of a pigeon's-egg, of a soft, spongy-looking character, and attached to the jaw apparently by a pedicle; it presented the general appearances of an epulis, and a portion of it examined under the microscope was seen to consist only of simple epithelium. The patient discontinued his attendance at this Hospital, and remained without further treatment till he applied to the Great Northern Hospital, on the 18th of September. In the meantime the tumour had very rapidly enlarged, and the pain and inconvenience, especially as to the difficulty of taking food, greatly increased.

After admission, the case was watched for a week, during which the morbid growth very perceptibly increased; and a consultation was held, which resulted in four out of five of the surgeons agreeing that an external incision should be made, and as much of the bone, together with the morbid growth, be removed as might appear advisable.

The operation.—On the 27th of September, 1860, Mr. Adams proceeded, when the patient was fully under the influence of chloroform, to make a deep, semi-lunar incision four inches in length in the direction of the lower jaw, and crossing the angle of the bone. The morbid growth, as thus exposed, presented very much the appearance of soft cancer, traversed by bands of fibrous tissue, and as it was now evident that the bone was largely implicated, and, indeed, completely destroyed at the angle, Mr. Adams immediately decided to disarticulate and remove the right half of the lower jaw from the symphysis, where the bone was quite sound. This was readily accomplished in the ordinary way, though, in consequence of the depth to which the growth extended in the pterygo-maxillary region, the hæmorrhage was greater than generally occurs when the bone is excised for hard circumscribed tumours.

Progress of the case.—The man progressed very favourably, and without any secondary hæmorrhage or other interruption. On the tenth day, he was able to eat a mutton chop, and the wound presented a healthy granulating appearance. The thickening and induration of the integuments gradually subsided, and cicatrization proceeded favourably. On the 2nd of November the wound was nearly closed, and the man left the Hospital.

At the present time, November 22nd, the wound has a firmly-cicatrized, contracted and deeply-puckered appearance, except at one part, where a small aperture still communicates with the mouth, like a fistulous

opening; this will probably be closed in a short time. The surrounding induration has subsided in a most favourable manner.

Nature of the tumour.—The tumour was submitted to the Pathological Society on the 16th of October, and described by Mr. Adams as an example of epithelial cancer. The tumour was of soft consistence, more or less lobulated in form, and on section presented a uniform white colour, its structure being traversed by dense fibrous bands, having an irregular reticulate arrangement, forming meshes in which the soft tissue was contained; the arrangement was obvious to the naked eye, and still more so under a low magnifying power. Microscopically examined, the soft tissue, whether taken from the central portion, or near to the surface, exhibited the ordinary characters of epithelial cell-formations, *i.e.*, epithelial cells of all forms and sizes, masses of clear polygonal cells with round or oval nuclei in some parts, and in other portions small round or oval nuclei best seen after the addition of acetic acid; good specimens of the laminated capsules met with in epithelioma were not obtained, but some rounded masses resembling these were met with. No myeloid cells were seen even in the portions of the morbid growth which extended into the interior of the horizontal ramus of the jaw. The fibrous bands consisted of simple fibrous tissue, as well as of nucleated fibres.

The tumour was intimately connected with the bone, and not only extended outwards, but had eaten its way into the substance of the jaw, entirely destroying the bone from the angle to within an inch of the symphysis, where it filled the cavity of the bone. In the operation some portions of the bone were found nearly detached, and broke away, and this condition had probably given rise to much of the common inflammatory mischief, and the abscess which tended to obscure the diagnosis of the precise nature of the morbid growth. The bone was quite healthy, where sawn through near to the symphysis.

Mr. W. ADAMS, 16th of October, 1860.

Termination of the above case.—The patient subsequently went into the Middlesex Hospital; and, after being an inmate of this Institution for several months, died on the 8th of August, 1861. The following additional notes have been kindly furnished by Mr. Willis, the House-Surgeon:—

“On the right side of the face, there was a large ragged sore with various elevations and depressions, extending from the zygoma and malar bone, to one inch and a-half below the line of the jaw in the neck. The sore extended from the ear behind to a considerable extent

DESCRIPTION OF PLATE IX.

Figures 1 to 4 illustrate Mr. W. Adams' case of Cancer of the Lower Jaw-Bone, p. 205.

Fig. 1. Represents the microscopic appearance of a section of the growth.

Fig. 2. The fibre elements.

Fig. 3. The epithelial elements.

Fig. 4. Detached cells more highly magnified.

Figures 5 to 9 illustrate the report on Mr. T. Holmes' case of Congenital Tumour of the Neck, p. 208.

Fig. 5. From the deep portion. The margins of the tumour in this part would not fray out like fibrous tissue, but split or tore into fragments. Its composition was found to be small round or oval nuclei, abundant in a granular basis-material.

Fig. 6. The same after treatment with acetic acid. The small rounded, oval, or irregular nuclei became distinct, and were seen to be very numerous. The basis-material was rendered translucent.

Fig. 7. Free cells,—elongated, tailed, fusiform, or spindle-shaped fibre-cells; those of small size were most abundant.

Fig. 8. Reticular bands of nucleated fibrous tissue, delicate and wavy; oval nuclei may be indistinctly traced in it.

Fig. 9. The same, after the addition of acetic acid. Elongated and spindle-shaped nuclei in parallel linear series were now rendered very distinct, with the intermediate substance translucent.

Figure 10 illustrates Dr. Harley's case of Diphtheritic Exudation, p. 241.

a. Cells, mostly of considerable size, forming the chief portion of the mass.

b. Cells occasionally met with, presenting two or three nuclei.

c. A large cell, the nucleus of which contained a nucleolus.

The portion of membrane, from which the microscopic appearances represented in the Figure were drawn, was removed from the trachea.

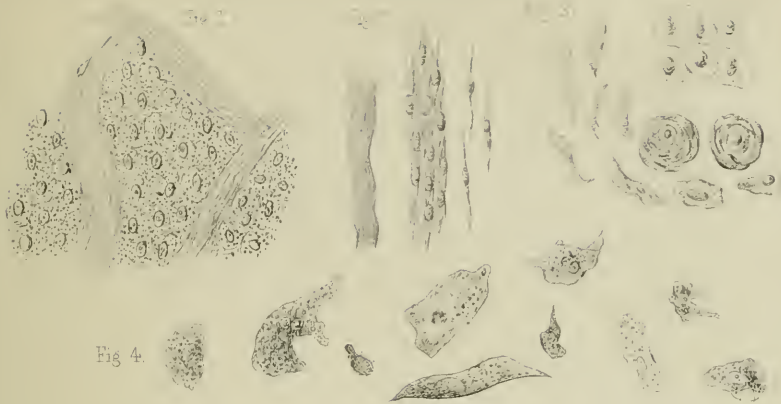


Fig 4.



Fig 5.

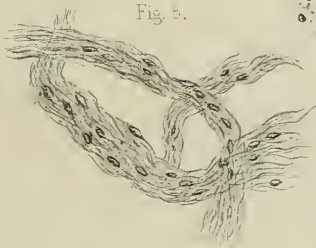


Fig 6.



Fig 7.



Fig 8.

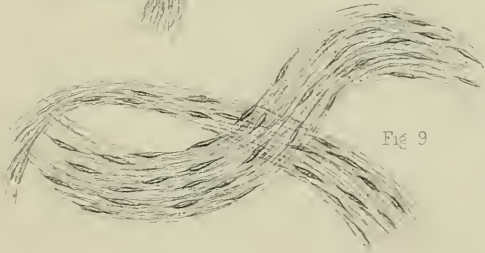


Fig 9.

W Adams del.

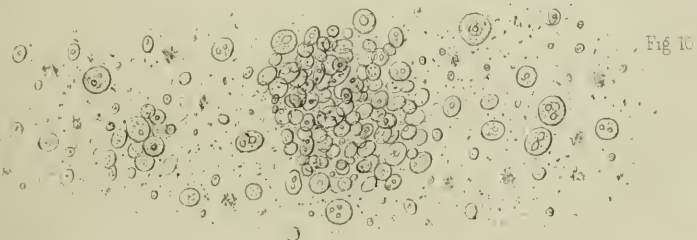


Fig 10.



over the cheek. The sore communicated with the mouth by an opening which would admit a hen's-egg. The superior maxilla and malar bone were to some small extent involved. The lower maxilla was removed in its right half. The remaining portion of bone was unaffected. The root of the tongue was considerably invaded with morbid deposit. None of the internal organs were involved. The patient was under Mr. De Morgan. There was bleeding towards the latter part of the patient's life, but great emaciation was induced, in consequence of the inability of his getting his food swallowed; it escaped by the neck."

Mr. W. ADAMS, 15th of August, 1861.

Report on the above specimen.—The specimen consisted of several portions of the jaw-bone, and of a tumour which had grown from its horizontal ramus, extending apparently from the angle nearly to the symphysis. The whole of the bone on the affected side had been removed, from the symphysis to the condyle. The section of the symphysis was quite healthy. The morbid growth appeared to proceed from the bone, and not only to extend outwards, but to have eaten its way into the substance of the jaw; so that all the bone had disappeared for a considerable distance, apparently from the angle to within less than an inch of the symphysis. The growth was more or less lobulated. On cutting through one of the rounded projecting lobules, the surface of the section was seen to present a uniform white colour, could be easily broken up, and thus differed from a fibrous growth, though at the same time it had somewhat of a fibrous fracture, and thus was unlike ordinary epithelioma. It emitted no juices on pressure. Thus the naked-eye appearances suggested, what the microscope afterwards verified, that its structure was composed of both fibrous and epithelial elements. The combination of these two elements was probably in the form portrayed in Mr. Adams's sketch—a stroma of fibres arranged in a net-like manner, and containing within its meshes the epithelial formation. This was not proved with regard to the tumour as a whole, but was rather conjectured from the examination of small portions (Plate IX., Fig. 1). Under the microscope it was evident that two different structures were present—the one dark and opaque, consisting of cells resembling epithelium; the other more transparent, and composed of fibres. These appeared in varying proportion in different parts, but were found in the lobular projecting masses, and deep in the substance of the bone, alike. On tearing up the tissues, the fibrous was found composed of simple fibrous tissue, as well as of nucleated fibres, the latter of which might be separated into their individual elements (Fig. 2). The cell-growth

consisted of dark masses, in which the addition of acetic acid brought out large oval nuclei, lying in pretty close proximity. The boundaries of the cells in which they were contained appeared polygonal. There were also to be seen some rounded masses, resembling the laminated capsules of epithelioma, though not very perfect specimens of them (Fig. 3). When further torn to pieces, the cells were clearly seen to be of the epithelial kind and of all forms and sizes (Fig. 4). No myeloid cells were seen.

We consider that the presence of so large a proportion of fibre-growth is due to the deep-seated nature of the growth from bone; but that, notwithstanding the presence of so great an amount of fibrous tissue, the disease may be best classified with epithelial cancer; and that this conclusion receives much support from the total destruction of so large a portion of the bone by a tumour of so short duration of growth.

Dr. WILKS and Mr. HOLMES, 6th of November, 1860.

2. *Melanoid cancer, developed in a common dark mole containing pigment.*

A lady, æt. 60, was the subject from birth of a small black mole on the outer side of the left arm. About five years ago, it was irritated during hot weather; but this condition soon ceased. The same thing occurred again about one year and a-half ago, and subsequently the mole resumed its natural appearance. Again, last summer, it became, as before, red, heated, and a little swollen, and being pricked it bled a little. This time the irritation did not subside, but the tumour continued to grow bigger, and has done so ever since. It is now a dark-coloured swelling of the size of a large nut, quite moveable on the deeper parts, being evidently seated in the skin.

Two months ago, she felt pain and a swelling in the left axilla. This has rapidly increased in size, and now fills the axilla; it is firm and resisting, and is the seat of much pain. In consultation with Dr. Reynolds and Mr. Paget, it was decided to remove only the tumour of the arm, which was accordingly done. Under the microscope it is seen to contain numerous large round and oval cells, with one or two or more nuclei, and many black pigment granules.

Mr. H. THOMPSON, 6th of November, 1860.

3. *Congenital tumour of the neck.*

A male infant was admitted, on November 6th, 1860, at the Hospital for Sick Children, on account of a large congenital tumour, situated

at the back of the neck. The child was fourteen days old, on admission, and had been under observation for the previous ten days, during which time the tumour had grown rapidly. It was therefore decided to remove it without loss of time. The tumour was of a round shape, not very prominent, measuring about two inches in each direction, and about three-quarters of an inch in height, and extending from just below the lobe of the right ear to a short distance above the scapula. The skin over it was marked by the stain of a large nævus, or mother-spot. Two or three large arteries could be felt pulsating over the tumour, and very large veins ran across it. When the child cried the swelling appeared somewhat more tense. At one end of it was a small separate lobule, and near this part the tumour was so soft that it was at first thought to contain fluid. The same deceptive sensation was experienced also in other parts. The whole tumour was freely moveable on the deeper parts, and no pedicle or neck could be felt.

A very small quantity of chloroform was administered, and a groove cut round the base of the tumour with a knife; the chain of the écraseur was then carried round the tumour in the groove; and the growth removed without any serious bleeding.

The skin, and the nævus-mark on it, seemed to have no connection with the substance of the growth, which consisted of a homogeneous whitish, soft solid, not containing any cysts, and showing no structural elements, except an abundance of small rounded nuclei. The fibrous tissue was in very small quantity.

The wound healed rapidly and without a bad symptom, although the surface to skin over was necessarily large. The cicatrix was very small in comparison, and the parts quite free from contraction. The child was seen in perfect health half-a-year after the operation.

Mr. T. HOLMES, 6th of November, 1860.

Report on the above case.—The tumour was of a compressed or flattened form, with a circular outline, measuring about three-quarters of an inch in thickness, and two inches and a-half in its transverse diameter. A portion of skin of corresponding size had been removed, together with the tumour, from the surface of which it could not be separated. The direct and intimate connection between the structure of the tumour and the skin was further displayed by a section; and from the appearances it seemed probable that the tumour had originated in the deeper layers of the skin, and spread circumferentially, extending inwards towards the fascia, to which, however, it was quite superficial, and with which it had no connection. The deep and marginal surfaces of

the tumour were smooth and clearly defined, with very slight disposition to lobulation. No infiltration had taken place of adjacent tissues, which were quite healthy. On section the tumour presented an uniformly smooth surface, and was of a pale whitish colour; its tissue was rather soft and elastic to the touch—more or less of an uddery consistence and appearance. Reticulated bands of delicate fibrous tissue traversed its structure, and were most distinct near to the cutaneous surface. No juices exuded on the application of pressure. On a microscopical examination its structural elements were seen to be of the simplest kind, consisting of small, round and oval nuclei embedded in a granular basis-material, and included in the meshes formed by nucleated fibrous tissue. It did not present any of the microscopical appearances generally met with in cancerous or malignant growths. The appearances of the nucleated and granular material are represented in Fig. 5, Plate IX., and the same, after the addition of acetic acid in Fig. 6. The acid rendered the granular basis-material translucent, and brought the nuclei more clearly into view. The cell-forms and nucleated fragments, met with free in the specimen under examination, are represented in Fig. 7. The cells were generally elongated, tailed, fusiform or spindle-shaped, such as are generally described as fibre-cells. The appearances of the nucleated fibrous tissue are represented in Fig. 8. Bands of delicate and wavy filamentous tissue, in which elongated nuclei could be seen, traversed the tumour in curved lines, forming meshes which contained the nucleated and granular elements. Acetic acid rendered this tissue translucent, and brought the spindle-shaped nuclei more clearly into view, as represented in Fig. 9. From the evidence of the microscopical examination, and the general characters, we consider this specimen may be regarded as an example of fibro-plastic growth; or from the great preponderance of the nucleated and granular material, it might, perhaps, be called a fibro-nucleated tumour.

Dr. J. W. OGLE,

Mr. W. ADAMS,

Mr. HOLMES, 20th of November, 1860.

4. *Tumour of the breast.*

The specimen was removed by Mr. Wood from the left breast of a woman, *æt.* 44, at King's College Hospital, November 3rd, 1860.

The growth had been observed nine months, and had given *no pain* whatever. The breast preserved its normal outline, and had much of the look of one enlarged by lactation. A few large veins

were apparent upon its surface. The nipple was not retracted, and could be moved freely upon the tumour. To the touch the mass was exceedingly hard and resisting, and over the whole surface small nodular projections were evident. It could be moved with ease over the pectoral muscle, but was evidently closely adherent to the surrounding areolar tissue. Outwards towards the axilla, and inwards towards the sternum, it was very indistinctly defined, and evidently dragged upon the neighbouring tissues more at these points when moved. Around the nipple, at a little distance from it, the skin was more hard and unyielding, and showed a tendency to become adherent. The patient was rather thin, but stated that she had tolerably good health. She had no marked cachexia. During the operation there was considerable bleeding, chiefly from the enlarged veins. Five or six arteries were tied, most of them branches of the external mammary. Some difficulty was experienced in isolating the diseased mass from the surrounding fat in which its outline was not very well defined, especially towards the axilla and sternum, whence several small portions were subsequently removed. It was not at all adherent to the pectoral muscle. The portions of skin implicated were removed with the tumour.

On section the tumour exuded a copious juice, which filled up numerous small areolar-looking cavities, of which the tumour was made up. Some of them seemed to be the hypertrophied ducts of the gland. They were round in section,—the walls thickened and rigid. Vertical section across the nipple showed these ducts assuming a more flexible and normal character as they approached the surface,—the base of the nipple not being as yet implicated by the disease. The hardness of the tumour resulted from a thickened, almost cartilaginous, state of the areolar septa of the gland lobules. It gave a very elastic resistance to the finger passed across the cut surface. Superficially, a close inspection showed a few small cysts filled with a darkish coloured fluid.

The microscope showed the greater part, even of the hard septa, to be composed of cells, with proportionately a small amount of fibrous tissue. These cells varied considerably in form and size. The most prevailing shape was oval or slightly elongated, with a single well-defined nucleus and nucleolus, and, in many instances, more refracting than usual, presenting much of the appearance of cartilage cells. Numerously interspersed among these, however, were compound cells of an irregularly-rounded outline, containing three or four nuclei, with nucleoli and much granular matter. A few of the cells assumed a caudate character. In the exuded juice were many fat globules

and large granular cells. The varied shapes and sizes of the cells, their number, and especially the characteristic appearance of the compound cells, taken with the stony hardness, and look, and feel, of the cut surface, lead us to place the tumour in the carcinomatous class.

It differs, however, from ordinary scirrhus of the breast. 1. In being entirely free from pain. 2. In its comparatively rapid growth. 3. In its infiltrating character, preserving the general outline of the gland-formation, as shown in the thickened septa and hypertrophied ducts, instead of the absolute obliteration produced by the ordinary form of scirrhous invasion. 4. In the cartilage-resemblance of many of the cells, which points to a transitional form of the disease, and allies it to a more normal form of cell-growth. Mr. JOHN WOOD, *6th of November, 1860.*

Report on the above case.—The specimen of tumour of the breast, which Mr. Wood requested me to examine, I have no hesitation in denominating cancer; and I believe it to be so both from the appearances presented to the naked eye, and from the microscopic. The section displays a pinkish vascular structure, which on scraping yields a milky juice, which fact alone I consider to be more characteristic of the disease than any other condition. Again, on submitting portions to the microscope, abundance of nuclei are seen, and also cells containing large oval nuclei, some even two or three.

Although I do not think that there is anything, in the size or form of the cells from a cancerous growth, which is characteristic, or could warrant a positive decision as to their nature, yet when it is known that they are the constituent elements of a new or morbid growth which has sprung up in some part of the body, a conclusion as to their malignant character may be fairly inferred; for I consider that every tumour containing nucleated or embryonic cells is malignant; and if these be of a simple kind that it deserves the name "cancer," as the term is usually understood. The fact of the presence of such cells or nuclei existing without any higher development is shown by the exudation of milky juice when the tumour is squeezed. For these reasons I should unhesitatingly style the present specimen cancer.

Dr. WILKS, *20th of November, 1860.*

5. *Sub-peritoneal tumours of a peculiar character, associated with cutaneous tumours.*

W. M., *æt. 57*, was brought to St. Mary's Hospital from the country, and was admitted under Dr. Sibson on November 2nd, 1860. He was

suffering from ascites, and was in a state of extreme exhaustion. He never rallied from the fatigue of the journey, but died the day after his admission, not having been able to give any account of his illness.

The entire surface of the body was studded with tumours of various size; the smaller ones, which were most numerous, were about the size of a pea, and these were prominent; the larger were of various extent, and for the most part appeared flat—some on the back, however, were large, and almost pedunculated. They were soft, smooth, and of the colour of the natural skin. When the deep layer of skin beneath any tumour was cut through, the projection on the surface disappeared, and the tumour protruded through the opening. They were thus developed within the skin itself. They were seen under the microscope to consist of fibres with numerous vessels, and by acetic acid a large number of nuclei were rendered visible.

The peritoneal cavity contained a large amount of fluid. The omentum was thickened and puckered, and every part of the peritoneum, the omentum, mesentery, small intestines and parietal peritoneum, was marked with small projections of about the size of a pea, or larger. The membrane was continued over them, so that they were sub-peritoneal; they consisted of a pale-yellow cheesy-matter, containing granules and small cells or nuclei. The mesenteric glands were also enlarged, and contained similar matter. Between the diaphragm and liver (which were adherent to each other) were found large masses of this yellowish material, which projected into the substance of the liver, giving an appearance resembling malignant disease of this organ; other similar, but smaller, tumours pushed into the liver from the porta. There was seen also another tumour on the convexity of one of the coils of the small intestine, which differed greatly in appearance and structure from those described. It was about the size of a walnut, and instead of consisting of grey or yellow cheesy-matter, it was found to be firm and vascular, and to consist of white fibrous tissue.

There was fluid in both sides of the chest; and in the apex of each lung, and at the upper part of the lower lobe, there was tubercle. The kidneys were of normal size and appearance, but felt rather dense.

Dr. W. H BROADBENT, *20th of November, 1860.*

[After the report on this case was presented to the Society, some particulars of the history were obtained from W. Rayner, Esq., medical officer to the Uxbridge Union, under whose care he had been previously. He was a confectioner, and of active habits. The tumours on the skin had existed for more than twenty years; his health had been good till

within six months of his death. He was taken into the Union Infirmary on August 6th, suffering from general debility; was discharged on the 12th, but re-admitted on the 16th. The ascites was not discovered till October—a month before his admission into St. Mary's Hospital.]

Report on the above case. — The material, scattered in small tubercles over the surface of the peritoneum, and forming large masses in the substance of the adhesions binding the liver and other organs to the parietes, had an opaque buff-coloured aspect, and a consistence varying between that of fibrinous blocks in the liver or spleen and that of cheese. Here and there it was broken down. It yielded no juice, but from the softest portions shreds of tissue could readily be detached by scraping. It consisted microscopically of a fibroid matrix, which swelled up and became transparent under the influence of acetic acid, was obscured by granular matter, and contained in its meshes numerous corpuscles. These latter were imperfect, and apparently degenerating, presented nothing characteristic, but when detached from a section were either entirely free or embedded in ragged shreds of tissue.

The number of corpuscles present might give rise to the suspicion of cancer; but, on the other hand, the material had none of the more obvious characters of cancer, and yielded no creamy juice, while nothing in it was incompatible with its tubercular nature.

Springing from the walls of the small intestine, opposite to the attachment of the mesentery, was an ovoid tumour, about as large as a pigeon's-egg; it was tough, elastic, and homogeneous in texture, and had the greyish, slightly translucent, character observed in fibroid tumours. Under the microscope it was found to consist of a close network of fibroid tissue; the fibrillæ of which were for the most part irregularly arranged, had a clear sharp outline, and were readily acted on by acetic acid. No elastic fibres, and no cells or nuclei were anywhere visible. The remarkable feature in the tumour was the abundance and distinctness of small vessels and capillaries. These traversed its substance in all directions, and presented, almost without exception, thick glassy walls, lined by minute earthy globules, which formed a layer differing in thickness and distinctness, and sometimes obliterated the channel of the vessel. The walls looked as though infiltrated with the so-called amyloid deposit, but were only coloured yellow by iodine.

The cutaneous growths, which were for the most part globular, varying from the size of a marble downwards, and often clustered, were less dense, but even tougher than the tumour just described. They

consisted of fibrous tissue, for the most part of a tolerably normal character, mixed with elastic filaments, but without fat or other corpuscles than those which probably belonged to the walls of vessels. They, like the intestinal tumour, contained innumerable and very distinct vessels, but the parietes were in all cases unthickened, and apparently healthy.

The main difficulties in the way of arriving at a just conclusion in reference to the nature of the growths in the above case are the *coexistence* of the tegumentary tumours (with the tumour attached to the intestine), and of the tuberculoid deposits scattered over the peritoneal surface, and the absence of any history to throw light on the relationship between them. Were they all of the same essential nature, but modified in structure and appearance by differences in age, site, and other conditions? or, were they completely distinct from one another, and associated by mere accident (so to speak) in one individual? If the former view be correct, it is obvious that the tubercular character of the peritoneal disease cannot be maintained; but we are equally unable to accept the cancerous hypothesis, for not only was the tuberculoid material, as before shown, far removed from cancer in its structure, but the solitary intestinal tumour and those belonging to the skin had nothing whatever of a malignant character. The latter view, then, is the one to which we lean. We are disposed to regard the peritoneal disease as really tubercular, or closely allied to that form of affection, and to look upon the external tumours as fibro-cellular growths, with nothing of a specific character, but (judging from their extreme vascularity) not improbably erectile. We need scarcely repeat that the solitary highly-vascular tumour in the abdomen resembled the latter in almost every respect, except the remarkable degeneration which its smaller vessels had undergone.

Dr. BRISTOWE,

Dr. W. H. BROADBENT, *5th of February, 1861.*

6. *Enlargement of the viscera and glands.*

The disease present in this case has generally been styled cancer, and is of the same kind, apparently, as that described in the last volume of the "Transactions,"* where the kidneys and other organs were infiltrated with a cell or nuclear growth, without any adventitious material being visible to the naked eye.

E. H., æt. 10, residing at Peckham, was admitted into Guy's Hospital under Dr. Gull on the 10th of October, 1860. She had been ailing about four months, without any particular symptoms, and without any

* P. 239, where, also, reference is made to former examples.

obvious cause, the condition in which she was seen having gradually come upon her. Her neck was occupied by enlarged glands, which, on careful examination, were found to be principally the submaxillary and parotid. The abdomen was distended by considerable enlargement of the liver and spleen. There was some œdema of the legs, as well as purpuric spots on various parts of the body. The urine was not albuminous. In spite of all these morbid phenomena she did not keep her bed, and died at last rather suddenly.

Post-mortem examination.—The great enlargement of the liver, spleen, glands, &c., at once suggested the lardaceous or waxy disease of the viscera, but this was found, as soon as the organs were incised, not to be the case. The liver reached over to the left side, and was double the usual size in a girl of the subject's age, weighing above six pounds. The spleen also was much enlarged, but the principal and most striking change was in the kidneys, both being much increased in size, but one enormously so, weighing nineteen ounces, and the two together, one pound and three-quarters. These organs were not altered in shape, but simply enlarged and of a white colour. The liver was rather soft, and presented to the eye somewhat the appearance of the ordinary fat organ. The kidneys were quite white, but of their usual shape, as if they had simply grown in size, resembling, indeed, a mass of blanc-mange cut out to the figure of these organs. The lymphatic glands throughout the body, in neck, chest, abdomen and groin, were enlarged, but not to any great extent; but the thymus and salivary were considerably increased in size. They all, however, presented much the same appearance when incised; not having the opaque-white, soft appearance of the liver or kidney, but being firm and somewhat translucent. The lymphatic glands presented this character, as did also the thymus, which was very large and hard, but not altered in shape; the parotid also, and submaxillary were affected in like manner. The pancreas was also slightly involved, and the walls of the uterus were increased in size and very tough. On scraping these, nothing but an opaque serum could be got from them; in the kidney, however, the juice was somewhat milky. On examining all these diseased organs, the increase of size appeared due simply to the growth of cells or nuclei in the midst of the tissues. These cells were small and somewhat resembling pus cells, though not quite so regular in shape. These could be best seen in the kidneys, where they were found infiltrating the organs between the tubuli, pushing these aside, and forming in some places very considerable masses of cell-growth; the tubules themselves being but little

affected. The liver, glands, &c., appeared all to have their enlargement due to this same cellular infiltration.

It will be seen that the disease here found answers theoretically to the definition of cancer, if by cancer we mean the production of nuclei or cells pervading the various organs to the destruction of life. Practically, however, we generally suppose the presence of some considerable collection of such adventitious products, so as to form a circumscribed tumour, or a visible mass of disease; and thus, in this case, no one, probably, on opening the body and perceiving the mere enlargement of the viscera, would have had cancer suggested to his mind, but rather the presence of the lardaceous or waxy form of disease. And in speaking of this, it is worthy of remark that, associated with this peculiar amorphous translucent material, it is not uncommon to find such cell-production as was seen in this case; and thus it is highly probable that there may be a close bond between these two forms of disease, viz., the lardaceous and that which is here described.

In a case somewhat allied to this, brought before the Society at a previous meeting, it was a question how far the ill-formed nuclei approached to those found in tubercular disease, so as to demand its name rather than that of cancer. All which facts prove how difficult it is, at present, to bring all these forms of disease under one or two categories; and how erroneous it is, because nearly all the adventitious deposits were, for a long period, classified either under the name cancer or tubercle, that therefore we should always attempt to force any individual example into one or the other class. We think that such a disease as here described, if placed in connection with the others referred to, will stand out as a very distinctive form of disease; whereas, if placed, like them, under cancer, it is uselessly hidden, and only tends to obscure the term itself. From such considerations one might allude to the corroboration which such a case gives to the most recent theories respecting cancer, that it is not a well-defined specific malady, but passes by insensible degrees into other forms of disease. For example, if such an organ as the kidney in this case could, by some, be styled cancer, and also if such cells as here found may be constantly met with in the lardaceous form of disease, it would prove a close relationship between them. Again, if with the lardaceous material, ordinary inflammatory products be met with, so that the former is without hesitation classed by some with Bright's disease, it would show, how linked together are all these forms of disease, together with several others which might be mentioned. This may, at present, be a very strong

inference to draw from such a case, but we think does less violence to recognized pathological conditions, than by forcing such a case into the category of cancer.

Dr. WILKS, 20th of November, 1860.

7. *Syphilitic disease of spleen, liver, and testes.*

The patient, a man *æt.* 38, had been long under Mr. Bryant's care for caries and necrosis of the cranium, from which he at last died. A large part of the side and top of the head was devoid of integument, and a large portion of necrosed bone was seen in this situation. Around this, the bone was carious, and at the circumference where it joined the scalp there was an abundance of yellow tough fibrous material. The dura mater had become involved, and at last the brain-substance within. The liver was adherent to the diaphragm at its upper part, and here on slicing the organ were found some large hard yellow masses, such as have often been exhibited before in connection with syphilis. Also, around this part were other distinct masses. The spleen, in like manner, had a mass of similar deposit about the size of a walnut. It was composed of simple fibre-tissue, and when examined by the microscope contained also numerous fat-granules. The testes also were almost destroyed; the left somewhat enlarged from the presence of small isolated round masses of firm yellow matter; the other atrophied by a fibroid degeneration.

The fact of the liver and testes being affected in this manner has, on many previous occasions, been brought before the notice of the Society, but it has never yet been shown that the spleen may be similarly affected. This, however, does not add to the nosology one more syphilitic disease, but merely shows that the spleen may be affected in common with the other organs of the body. The statement must be refuted that there is any desire to add to the category of syphilitic affections; the proposition being simply this, that in constitutional syphilis there is a disposition to the production of a low-organizable lymph in nearly every part of the body, and that, although hitherto, surgeons have merely spoken of this as occurring on the exterior of the body, and affecting bones, skin, muscles, &c., yet a more extended study of morbid anatomy has revealed the fact that the internal organs may also participate in a similar form of disease.

Dr. WILKS, 4th of December, 1860.

8. *Syphilitic deposit in the spleen and testes.*

J. S., æt. 41, had been ill two or three years with general cachexia, ostitis, &c., the result of syphilis. Whilst in this state a hernia, from which he had long suffered, became strangulated. He was operated on, but died. On examining the body, the throat was found to present the remains of ulcers, the tibiæ were much enlarged. The liver was firm, and in various parts contained some fibre-tissue and lardaceous matter, but no distinct nodules. The spleen was large and firm, and in its interior held a large mass and several smaller ones of a tough yellow substance, possessing no trace of organization. The testes were large and very hard, and nearly destroyed by fibrous exudation into their tissue, as well as by firm nodules scattered through it. Tunica vaginalis thickened and adherent. Dr. WILKS, 4th of December, 1860.

9. *Tumour and portion of lower jaw, removed by excision.*

This specimen consisted of the left half of the lower jaw, which had been sawn through close to the symphysis and at the angle, and removed with a large fibrous tumour which grew from it. The tumour and the portion of diseased bone from which it grew, are represented in the annexed cut (Woodcut 22).

WOODCUT 22.



The patient was single, æt. 27, and in good health until four years before the operation. A molar tooth on the left side of the lower jaw was

then decayed, and a small tumour, like a pea, appeared on the gum just outside the decayed tooth. It grew very slowly over the teeth. After a year it was about as large as a walnut. It grew more rapidly during the last year. About five weeks before operation one tooth was extracted, and a second was drawn a fortnight after the first. Considerable bleeding followed the second extraction, and a small portion of the tumour came away attached to the fang of the tooth. This was examined and found to be simply fibrous in structure.

Her state on the 12th of February, 1861, is represented in the following cut, from a photograph by Dr. Wright (Woodcut 23).

WOODCUT 23.



The tumour covered all the remaining teeth on the left side of the lower jaw, and projected into the mouth, pushing the tongue backwards and to the right side. It interfered materially with mastication and deglutition, and rendered the voice very low and indistinct. All the incisors were pressed forward and to the right side.

On the 13th of February, Mr. Spencer Wells removed the diseased portion of bone and the tumour, by means of a single incision running along below the base of the jaw from the angle to the symphysis. The cheek was dissected from the tumour, and the jaw divided by saw and cutting forceps close to the angle and to the left side of the symphysis. The wound was united by metallic sutures, and the upper and lower molars on the right side were kept in apposition by a small mould of vulcanite, which had been prepared previously by Mr. Hulme. During the operation the patient was kept under the influence of chloroform by

Dr. Richardson, who administered it through a tube introduced into one nostril.

It was not necessary to use the mould after twenty-four hours. Nearly the whole of the wound united by first intention, and the patient made an excellent recovery.

MR. SPENCER WELLS, 19th of February, 1861.

10. *Tumour of probably cancerous nature, following recurrent fibroid.*

The tumour exhibited was removed by Mr. Hilton, from over the left deltoid of a strong well-made man, 44 years of age. There was no history of hereditary tendency to cancerous or other tumours, and no indication of any constitutional taint.

The patient had enjoyed uniformly good health until about two years previously to his present admission into Guy's Hospital. At that time he was struck upon the left shoulder by a falling beam; two days after the accident a black swelling appeared in the injured part. This gradually increased in size, and in February, 1860, Mr. Hilton removed what was believed to be a recurrent fibroid tumour. The wound healed perfectly, and the patient returned to his occupation. Six months afterwards the present tumour appeared and grew rapidly.

The tumour, when cut, presented somewhat the appearance of the more malignant forms of recurrent fibroid; but upon microscopical examination, it was found to be made up of cells, nuclei, and small nucleated cells, and to contain none of those cells with fine filamentous processes which are characteristic of the recurrent fibroid. It would appear that the tumour might, therefore, be considered as *cancerous* in character, although typical cancer-cells were not to be found, and comparatively little juice exuded on section.

This case was interesting as showing—1. That a malignant tumour may follow an injury received by a man in the prime of life, and, as far as can be ascertained, free from all cancerous disease, or inherited tendency thereto; and 2. That a tumour of a more malignant form may follow the removal of a comparatively innocent one. The greater malignancy of the second tumour was shown by the much greater rapidity with which it had increased, the different appearance it presented, and the different structure it was believed to possess.

MR. DURHAM, 19th of February, 1861.

Report on Mr. Durham's case of tumour from the shoulder.—In refer-

ence to the specimen of tumour removed from a man's shoulder, and which was exhibited at the last meeting, we have very little to add to the account then given. The section showed for the most part, a white, soft mass, emitting on pressure a milky juice, but towards the surface there were portions which had a somewhat firmer texture, and tore with a more fibrous fracture. The microscope showed throughout the whole mass nucleated cells, but these cells in the firmer portions were not only rounded or angular, but were lengthening into fibres. In some parts, indeed, the structure seemed mainly formed of such fibres with large oval nuclei, or if the term be preferred, lengthened cells with large nuclei.

The specimen is an interesting one, as illustrative of the theory that there are different grades of cancer, or of new growths in general; and that in this particular instance, the fact of the structure not being composed of simple rounded cells but lengthened ones, gives it a place in the scale just below that of the most marked forms of cancer, although it scarcely reaches to the next grade, which has a distinct name,—the recurrent fibroid, which indeed it somewhat resembles in its external aspect.

It is to be lamented, that no written record remains of the first tumour which was removed about a year before, but it is believed to have been recurrent fibroid. If this were positively determined, it would show, that in its re-growth it became somewhat altered in character, becoming indeed, a degree more malignant, as evidenced by its general aspect and microscopic characters.

Dr. WILKS,

Mr. DURHAM, 5th of March, 1861.

11. *Malignant ulcer occurring in a cicatrix.*

It was taken from the body of a Greenwich Hospital pensioner, æt. 81. He had been for ten years under observation and treatment. The ulcer was in the cicatrix of a wound—lower third and anterior aspect of the right leg—originally received at Trafalgar in 1805. It remained in an indolent condition for years. Within the last four years it became more irritable, and gradually assumed the appearance of the fibrous ulcer, so well described by Dr. Smith in the *Dublin Quarterly Journal of Medicine* for May, 1850, the warty tumour of cicatrices of Mr. Cæsar Hawkins, and the warty ulcer of Marjolin, 1828. (*Dict. de Médecine.*) There was the same arrangement of the granulations, which were composed of fibres in layers parallel to one another and

perpendicular to the surface of the tibia, easily separated from each other by a probe, and apt to bleed. There was a thin and offensive discharge, and the patient suffered great pain. The lymphatic glands were not affected. Caustics, such as the dried sulphate of zinc and nitrate of silver, caused great pain, and did no good. Water-dressing answered better, and relief from the pain was afforded by opiates. He would not submit to an operation for its removal. Of late, the granulations assumed more the appearance of a cauliflower excrescence. The specimen was removed this forenoon. It was found that the tibia was diseased, the compact tissue absorbed, and the interior of the bone filled with what Dr. Davis believed to be, on examination with the microscope, a malignant growth. Dr. DAVIS, *5th of March*, 1861.

Report on the above case.—On dissection of the soft tissues, no infiltration with cancerous deposit is discoverable; healthy tissue existed in immediate juxtaposition with the margin of the ulcer.

On denuding the bones (portions of the tibia and fibula), an oval aperture, about two inches in the vertical diameter by one inch in the transverse, opened into the hollow of the shaft of the tibia, through the inner or subcutaneous surface. The edges are sharp. A cavity, the size and shape of a small hen's-egg, has been formed within the shaft of that bone, apparently by absorption, which cavity in the recent state was filled with the tumour to be described. The walls of the cavity are thin. Had the life of the patient been prolonged, there is reason to believe that perforation would have taken place through the posterior surface of the tibia. There is no tendency to rapid expansion, as it is called, of the bone. The fibula is united to the other bone by osseous material, the effect, doubtless, of the injury mentioned by Dr. Davis.

The bed of the ulcer and tumour contained within the tibia consisted of a semitranslucent matrix, which in some places showed traces of fibrillation and was throughout finely granular. This matrix was densely infiltrated with withered, opaque, granular, nucleated cells, and an abundance of spherical, oval, and fusiform nuclei (a few multipolar). Some cells contained a couple or three nuclei, but most only a single one. We are disposed to consider the tumour a fibro-nucleated one,—one akin to fibro-plastic growths.

Mr. NUNN,

Mr. HULKE, *2nd of April*, 1861.

12. *Sero-cystic disease of the breast.*

This specimen was removed from the right mamma of Mary A. W., æt. 20, in March 26th, 1861.

She was a servant, and had enjoyed good health, her catamenia being regular. Three years and a-half ago, she first accidentally discovered a tumour in her right breast, it was about the size of an egg, and was situated in the centre of the breast behind the nipple, it did not cause her any pain.

When she first applied to me for advice, eighteen months since, the tumour was the size of a small orange, it was perfectly globular, and of a firm nature; and in my note-book at this time I had marked the case as being one of cystic disease. The patient then disappeared from observation, and did not reappear till six weeks before her admission into Guy's Hospital. The tumour had increased up to that period very slowly, but since then had grown most rapidly, and this growth had been attended with considerable pain; for three weeks, also, she had experienced a free discharge of a bloody fluid from the nipple, which could be readily squeezed out by pressure upon the part. The tumour was very large, measuring fourteen inches in diameter, and twenty-two inches in circumference. It was globular, with the nipple in the centre; quite moveable, and uniformly elastic; fluctuation being easily perceptible. The skin was much distended, and on its outer side was red and inflamed. The gland could not be separated from the tumour.

On March 15th I tapped the tumour, and let out a quantity of bloody serum and broken-down blood; to allow of its more ready evacuation the opening was enlarged, when the finger without force easily broke up a large portion of the growth. Two and a-half pounds of this material were taken away. The largest portion of the tumour was, however, of a more solid nature, which necessitated its removal by excision on the following day. The breast gland was intimately connected with the tumour, and was spread over it; its removal, with a large portion of the integument was required.

The patient's convalescence was very rapid. On making a section of the tumour through its centre and the nipple, its true nature was readily revealed, as being an admirable specimen of the sero-cystic, or cysto-sarcomatous, disease of the breast. At its lower part were many beautiful examples of intracystic growths, which turned out of their cyst walls; about the centre were similar growths, infiltrated with blood and breaking down; and in the upper part little else than extravasated blood and clot appeared visible. Microscopically, all the elements of

fibro-plastic tumours were present with badly-formed cæcal terminations of the ducts, as found in adenocœle. Its principal interest consists in its size, and rapid growth, together with the pathological appearances, which are characteristic of such tumours.

Mr. THOMAS BRYANT, 19th of March, 1861.

13. *Excision of the entire tongue for epithelial disease.*

A man of colour, of middle age, came under the care of Mr. Fiddes, of Jamaica, for disease of the tongue, in December, 1860. The patient had suffered for about six months. Believing it to be an epithelial growth, and that any other operation than that of complete excision would not remove the disease, Mr. Fiddes performed it at once. The man made a good and speedy recovery, and the organ is sent to the Society for the purpose of announcing Mr. Fiddes' second successful case of extirpation of the organ; and, also, to obtain a report on the nature of the disease, which he requests may be made. The first case, already reported in the *Edinburgh Medical Journal* for 1859, has continued well; and in both the function of taste continues, although in an impaired degree; the patients can also articulate sufficiently well to be understood without much difficulty.

This operation of excision of the tongue was first performed by Mr. Syme, between three and four years ago, and was once repeated by him subsequently; and, as far as my knowledge goes, has not been performed by any other surgeon besides Mr. Fiddes.

The steps of the operation were briefly these: division of the lip in the mesial line to the lower margin of the chin; extraction of a central incisor tooth; division of the lower jaw at its symphysis, the two halves being well drawn asunder by two assistants, the tongue drawn forwards with a vulsellum by a third; dissection of it from the floor of the mouth with strong blunt-pointed scissors, taking care to divide one lingual artery first, and ligaturing it before dividing the other; dissection continued close to the hyoid bone by means of a blunt-pointed bistoury, and removal of the tongue there; two small vessels in the last-named situation required ligatures. There were abundant room and light for all the proceedings, in consequence of the opening of the buccal cavity from holding well asunder the two rami of the lower jaw.

Mr. THOMPSON, for Mr. FIDDES, 7th of May, 1861.

Report on the above case.—The specimen consists of the entire tongue. With the exception of an ulcer on its right side, it appears to be a per-

fectly normal organ. The ulcer referred to commences on the right border of the tongue, about three-quarters of an inch from the tip, and extends backwards nearly an inch in length. The vertical diameter of the ulcer is about three-quarters of an inch, and its entire surface is more than covered when a shilling is laid on it. The sinuous everted indurated margins and warty surface exactly resemble those of an epithelial cancer. The mucous membrane above and below the ulcer is in a healthy state. On making a lateral section of the organ through the base of the ulcer an abruptly-defined disc of morbid growth is seen. In its thickest part the new growth has a depth of about three-teuths of an inch. The surface of this deposit is opaque-white, and yields on scraping an opaque shreddy juice, in which, under the microscope, the usual elements of epithelial cancer are abundantly seen. The compound or nested cells are in great numbers, and of very characteristic development. The mucous membrane near the borders of the ulcer is thickened, but at the distance of little more than a quarter of an inch resumes its healthy texture. The substance of the tongue, as displayed in the section, is everywhere quite free from infiltration or deposit, with the exception of the part involved in the original disease.

Mr. HUTCHINSON,

Mr. THOMPSON,

Mr. LAWSON, 21st of May, 1861.

IX. DISEASES OF THE DUCTLESS GLANDS.

1. *Hypertrophied spleen.*

The spleen weighed six pounds, was twelve inches in length, and eight at its greatest diameter. A rounded accessory spleen, about the size of a tennis ball, was attached by a narrow neck to its lower extremity. It was taken from a woman, æt. 73, who had lived in London for many years, and had never had remittent fever, but for some years had been in the habit of taking gin in considerable quantity.

About twelve months before her death, she complained of "a lump" in the upper and left portion of the abdomen, about two inches from the margin of the costal cartilages of that side, which occasionally gave her some pain. On examining the abdomen, a tumour could be felt, immediately underneath the integuments, having a globular shape and smooth surface, in size rather smaller than a fœtal head. The tumour

was not painful on pressure. As it could not be traced towards the ribs, and as the intervening space was resonant on percussion, it was supposed to be an enlarged kidney, but no unhealthy condition of the urine could be detected.

She suffered occasional pain in the region of the transverse colon, which appeared to arise from the presence of flatus in the intestine, but had seldom any pain in the tumour, which gradually lost its globular character as it increased in size. Her strength gradually failed, and about three months before her death she became excessively prostrate, very sallow and anæmic, and wasted gradually away. Slight and transient œdema of the ankles was sometimes present. There was no other glandular enlargement.

On opening the abdomen, little could be seen but the enlarged liver and spleen, occupying, together, at least four-fifths of that cavity, the liver alone taking up nearly one-half of the space, and extending obliquely from the costal cartilages on the left side downwards into the right iliac fossa. Its colour was rather lighter than natural, and the substance in a state of fatty degeneration.

The spleen occupied the whole of the left side of the abdomen, extending deep into the iliac fossa, and displacing the sigmoid flexure of the colon, which was pushed to the right side.

The stomach was large and the mucous membrane congested and dark coloured at the larger end, but tolerably healthy towards the pylorus. The mucous membrane of the intestines was healthy throughout.

The kidneys were of the natural size, flaccid, and full of urine.

The pleural cavity of the right side contained a large quantity of serum, and the lung itself was much congested, while that of the right side was healthy.

The heart was large, and its muscular structure fatty. There was no valvular disease.

The examination was made only a few hours before the meeting of the Society; no opportunity was therefore afforded to examine the structure of the glands.

Mr. JAMES PART, 19th of February, 1861.

Report on the above case.—The spleen referred by the Society for further examination is of very considerable size, measuring eleven inches and a-quarter in length, seven inches and a-half in breadth at its middle, and three inches and a-half at its point of greatest thickness; its weight is ninety-three ounces (five pounds thirteen ounces), including the splenculus, to be presently mentioned.

The general shape of the organ is a flattened ovoid. The anterior edge of the organ, though much thicker than natural, is considerably thinner than the posterior one; it presents two well-marked notches, one of them, about its middle, being a quarter of an inch deep, the other, near its lower end, being no less than one inch in depth. A shallow depressed line, about a finger's-breadth in width, runs transversely across the middle of the anterior surface of the organ; and there is another similar depression, but only an inch in length by half-an-inch in breadth, near the lower end of the spleen, and, like the other, on its anterior surface. Attached to the lower end of the spleen, yet at its posterior surface, is a spleneculus of the size of a small peach; the neck by which it is united to the organ itself is only three-eighths of an inch in diameter, but it consists of true splenic substance. From the particular position of the spleneculus but very little of it is perceptible below the lower end of the spleen, when the latter is placed in its normal position; it is almost certain, therefore, that notwithstanding the notable size of the spleneculus, it could not have been detected during the life of the patient.

The general colour of the spleen as seen externally is of a purplish red, but varying somewhat in degree, partly in consequence of portions of the splenic substance being darker than others, and yet more in consequence of the different thickness of the peritoneal covering; for the peritoneum is in parts much thickened, especially over the anterior surface and upper end of the organ. Over the lower part, the thickening is in irregular patches, and to a moderate amount, but, as a whole, it becomes more thickened, not only in extent, but in degree, towards the upper part of the spleen, where it forms a thick semi-opaque covering, and, over a space of three or four inches square, has become so firmly united with the diaphragm, that the two cannot be separated.

At the two shallow depressions already mentioned, but especially at the upper and larger one, the peritoneum is of considerable thickness, and the substance lying underneath is seen to be of a distinct yellowish colour—quite different from that of other portions of the surface. On section here, the peculiar appearance is found to be due to a deposit, in some cellular tissue, of a semifluid fat, or rather oily fluid, several drops of which gradually trickled away from the cut surface; this deposit is not separated by any defined line from the splenic substance below, but gradually commingles with it; this deposit, at the middle of the upper transverse depression, is as much as five-eighths of an inch thick.

As felt externally, the hardness of the spleen varies somewhat in

different parts; it is nowhere very hard, but is certainly most so, as a rule, where the peritoneum is thickened, and, therefore, more so towards the upper than the lower part of the organ. On section, the hardness felt externally is nowhere found to extend throughout the thickness of the organ, except at the extreme upper part, where the adhesion to the diaphragm existed; the induration is always most marked the nearer it is examined to the surface of the organ, and then gradually passes into the general softer, more pulpy character of the rest of the spleen. The indurated portions vary in colour, but are nowhere very pale, and in some parts they are of a dark port-wine colour. The spleen is free from any tubercle, cancer, cysts, or lardaceous deposit. Generally, the trabeculæ are more distinct than natural, and the Malpighian corpuscles are very evident, but at the indurated parts these are with difficulty made out, and, indeed, seem for the most part to be absent. The indurations appear to be due to a fibrinous deposit, which gradually becomes less and less from the surface inwards. While multitudes of the parenchyma cells of the spleen, pale cells (white corpuscles of the blood?), and altered blood discs are seen, &c., no appearances not common to normal spleens are detected, except the indurations already mentioned, the fat at the shallow depressions described, and the evidences of inflammation of the peritoneal covering. It is almost needless to add that the splenic artery and veins are considerably larger in size than natural.

Such are the facts; the inference deducible appears to be that the specimen is one of chronic hyperæmia affecting the whole organ, but especially its peripheral part, and giving rise, as it is especially apt to do in the latter situation, to a chronic inflammatory condition, with deposit of fibrinous matter, and a thickening of the peritoneal covering, which, over a rather large surface, has formed strong adhesions to the adjoining portion of the diaphragm; and lastly, that in two places at least the fibrinous deposit has undergone a fatty degeneration.

Dr. HARE, 5th of March, 1861.

2. *Enlarged thymus gland, in connection with a case of laryngismus stridulus.*

It is well known that amongst the various conditions which have been assigned as the cause of laryngismus stridulus, much stress has been laid by some authors upon an enlarged condition of the thymus gland; and it is certain that in some fatal cases of the disease, this gland is found of a much larger size than natural. Such was the

case in the instance which I now bring under the notice of the Society, but I do not adduce the specimen as a confirmation of the above theory, but as illustrating what, in common with many others, I believe to be the *coincidence* of an enlarged thymus gland and the disease in question.

The specimen consists of a thymus gland more than one-half larger than the organ ever becomes when in its normal condition, even at its maximum stage of development. It came from a child, fourteen months old, who died suddenly during a paroxysm of the disease, about half-an-hour after having been first seen by me. But the child was a very weak, feeble, and cachectic one, extremely pallid, and with such a peculiar sallow tinge that the presence of an enlarged spleen was at once deemed probable, and, on examination, discovered. It was a case in which, more from the feeble condition of the child than from any unusual severity or frequency of the paroxysms, the prognosis was considered highly unfavourable. While the child was at home sitting on the floor playing with some toys, and within half-an-hour of having been seen at the Hospital, it was seized with an attack of the disease, and suddenly fell back dead.

As already stated, the thymus gland was considerably larger than natural, and there was a slight amount of pulmonary collapse. The spleen came down fully an inch below the costal cartilages, and was about double the size of the organ usually found in a child of the age of this one; many of the mesenteric glands were enlarged to the size of a hempseed or small pea, but they did not appear tubercular, nor were there any tubercles in the lungs.

The only other fatal case of laryngismus stridulus which I have met with for many months past occurred just four days previously. I cautioned the mother, as I always do in cases of this disease, as to the possibility of danger during the attacks, but I by no means specially anticipated danger in this instance, for the child appeared to be, on examination, a very healthy one. During an attack of the disease, however, the child suddenly became dusky, and appeared to be dying. It was immediately taken to the Middlesex Hospital, but was quite dead when it arrived there. In this case I had the advantage of making the *post-mortem* examination with Dr. Murchison, but we found all the organs *quite* healthy.

In this latter case there was no local source of pressure upon, and consequent irritation of, the recurrent laryngeal nerves; and the cases in which the absence of pressure is found are so many, and the cases in which an enlarged condition of the thymus gland is found associated with a

fatal result in cases of laryngismus stridulus so few, that the instances in which, as in that before the Society, the gland is discovered to be enlarged, may fairly be looked upon as coincidences. Besides, in this case, the child was in a very cachectic condition, as evidenced by the diseased state of other organs, and would necessarily be very little able to resist the attacks of any such disease as laryngismus stridulus.

Dr. HARE, 21st of May, 1861.

3. *Case of bronchocele proving fatal by compression of the trachea.*

The following case affords an example of a rare, though not unprecedented, result of enlargement of the thyroid gland.

The patient was a tailor, 17 years of age, living in London. He was of robust and healthy appearance. Eighteen months before his death he found a swelling in the position of the isthmus of the thyroid gland. For some time before this he had had palpitation of the heart. The swelling soon extended laterally so as to occupy the sides of the neck, and he then began to have fits of shortness of breath. These were generally relieved by drinking cold water. When he was admitted into St. George's Hospital, less than a fortnight before his death, the enlargement of the neck was considerable, though there was no conspicuous prominence at any one place. The swelling was evenly spread over the front and sides, so as to give the appearance of general tumidity. The right side was rather the more prominent. In the attacks of dyspnoea, which sometimes came on, the air passed with a hissing sound as if from constriction of the larynx. He always preferred to sleep at night with his head quite low upon the mattress, without either pillow or bolster. Preparations of iodine were used internally and externally, but the treatment was cut short by the untoward result of the case. It was found that he always made a stridulous noise when he was asleep, though he usually breathed quietly when awake. This began immediately he went to sleep, and was loud enough to disturb the other patients in the ward, so that he had to occupy a room by himself. When he had been in the Hospital about a week, the hissing sound with respiration was heard while he was awake, especially after he had undergone the slightest fatigue. One night he went to bed, and to sleep as usual. About half-past eleven he woke suddenly, and sprang out of bed crying that he was choking. He made some attempts to put on his clothes, but fell down almost immediately, quite unconscious. The assistant apothecary and the house-surgeon were close at hand, and at once commenced the "Marshall Hall" plan of artificial respiration, while the

instruments for opening the trachea were sent for. He made a few ineffectual attempts to breathe, but before the operation could be performed he was perfectly dead.

When the body was examined, the neck appeared much swollen, the enlargement wrapping completely round it, and reaching almost from the chin to the sternum.

This was due to an enlargement of the thyroid gland, especially of the two lateral lobes. When the skin was dissected off, the muscles connecting the larynx with the sternum were found to have been pushed aside by the tumour. The swelling extended over nearly the whole space between the chin and the sternum, and encompassed the front and sides of the windpipe like a horse-shoe. The trachea was greatly compressed laterally, the two sides being bent inwards so as to be convex, instead of concave, internally. The compression commenced at about two inches below the vocal cords, and extended downwards for two or three inches. In the narrowest place the passage appeared of a triangular form, with the apex in front. The greatest width, at this place, was not more than a sixth of an inch. The trachea and large bronchi were congested. Excepting a mass of indurated tubercle at the apex of the right lung, all the other organs were healthy.

Dr. DICKINSON, 21st of May, 1861.

4. *Chronic enlargement of the lymphatic glands and spleen, with extreme anæmia.*

M. G., æt. 7, was admitted at the Metropolitan Free Hospital, in October, 1860, on account of enlarged glands in the neck, which were stated to have been slowly increasing for more than two years. Her aspect was very peculiar indeed. She was exceedingly thin, and her skin everywhere was dry, harsh, very opaque, and of a yellow-brown tint. Her lips, tongue, &c., were very pale. She was spiritless, and her general bearing indicated great languor and debility. I scarcely ever recollect to have seen masses of glands larger than hers were in proportion to her body. Her neck bulged out on each side in large nodular masses which increased in size downwards, and overhung the clavicles. The tumours were the largest on the right side. So remarkable was the appearance of her neck, that we had a photographic portrait taken, but unfortunately it was not executed sufficiently well to be worth introducing here. The glands were free from inflammation and were moveable on each other, feeling not unlike

bunches of round potatoes. She complained that they ached at night. Her appetite was bad. A sister, a few years older, who came with her, presented the most remarkable contrast in complexion, being well fleshed and very ruddy. The two had lived together under exactly similar hygienic conditions. They had lost their mother six years ago, as it was believed from phthisis; she died when M. G. was only six months old. Their father is living and in good health. On a second examination a few weeks later, we found that the child's spleen was enormously enlarged, reaching from the ribs downwards into the lowest part of the iliac fossa, and being broad in proportion.

The child remained under my regular observation for about eight months, *i. e.*, until May, 1861, the date of her death. Her case excited much interest, and she was repeatedly seen by several of my colleagues. On one occasion we admitted her for a few weeks as an inpatient, but the Hospital diet did nothing in improving her state. Fair trials were given to various salts of iron, to the bromides and iodides, and to cod-liver oil, but without any decided benefit. For several months before her death there was a progressive decrease in the size of the spleen, and of the glands in the neck, until at length they certainly were not half so large as they had been at first. But this diminution was unattended with any improvement in her strength. Her skin lost the brown tint but became paler. The anæmic pallor of her tongue and lips during the last month of life was most remarkable. At length she began to suffer from a troublesome spasmodic cough. During the fortnight preceding death her difficulty of breathing was great, she always lay on her left side, and the cough was almost incessant. Throughout, the cough was unattended by expectoration, and was of the short barking character which attends irritation of the laryngeal nerves. She at length died, evidently, in large part, from interference with respiration. Her state of advancing debility had, however, for long been such that death had been expected.

At the autopsy, the lymphatic glands of both sides of the neck, of the mediastinum, and those clustered in front of the spine, especially in the lumbar regions, were most extensively enlarged. Some of those in the axillæ were slightly enlarged. The mesenteric glands had for the most part escaped. The kind of enlargement was the same everywhere. None of the glands on section showed any deposit either of tubercle or of lymph. All were of a pale greyish-yellow and nearly homogeneous. Their texture was dryish and firm in most instances, but some were succulent. They were loosely connected together by firm

bands of hypertrophied cellular tissue, but showed no evidences of recent inflammation. Some of the largest were in the lumbar region, being of the size of small apples. Under the microscope the gland-structure showed fibroid tissue and exudation- and gland-cells in various

WOODCUT 24.



Represents the cell- and fibre-elements from a white nodule in the spleen.

stages of growth and degeneration. The spleen was very large and firm in texture, its exterior being in parts corrugated by contraction of its substance. A section exposed a very firm tissue resembling that of the normal organ, but much indurated, in which were scattered numerous yellow-grey masses of deposit, which were abruptly circumscribed. There was no softening in any of them, and they were firmly united to the adjacent spleen-structure. The thoracic duct was pressed upon at various points by the enlarged glands, which were adherent to it. It was carefully traced throughout, and appeared to be pervious. At its junction with the subclavian was a small soft growth of pedunculated lymph resembling the "vegetations" often seen on the valves of the heart

The recurrent laryngeal nerve on the right side was compressed by a very large and firmly-fixed gland, which adhered to the subclavian artery. The enlarged bronchial glands also pressed in various directions upon the trachea, and the right and left bronchi.

The blood everywhere was of the colour and consistence exactly resembling thin claret. In the cavities of the heart and large vessels were large firm masses of fibrin. I had never examined the blood with the microscope during life, but at the *post-mortem*, and I afterwards carefully inspected many specimens, and was unable to convince myself that

WOODCUT 25.



Represents the cell- and fibre-elements from a lymphatic gland.

any disproportion in the relative numbers of the red and white corpuscles existed.

No tubercle was found in the lungs, or in any other organ. The kidneys, liver, supra-renal capsules, heart, and intestines were inspected, but nothing worthy of note was observed.

The case presents a well-characterized example of fatal anæmia, co-existent with enlargement of the spleen and lymphatic glands, but without any demonstrable leucoeythæmia. It is interesting to note, that the child's mother was the subject of phthisis at the very time of her pregnancy, and died of that disease within six months afterwards.

Mr. JONATHAN HUTCHINSON, 21st of May, 1861.

X. MISCELLANEOUS SPECIMENS, INCLUDING MALFORMATIONS OF EXTERNAL PARTS, DISEASES OF THE SKIN, DIPHTHERIA, ETC.

1. *True Keloid.*

Mr. Sedgwick exhibited a coloured illustration of this rare form of skin disease, taken from a little girl, *æt.* four years and a-half.

The child was evidently strumous, with sharp, pinched-up features, and a very wide and projecting forehead, in which the veins are unusually conspicuous. There had been congenital talipes equinus of the left foot, for which the tendons had been cut on different occasions, with great benefit to the deformed limb. The first operation was performed when the child was four months old, the tendons being then divided in four places, and the last operation was performed in June, 1860, when the tendons were divided in two places; and the child is now able to walk about with ease. She has had no infantile diseases, and her appetite has generally been good. The skin has always perspired freely, and in hot weather the perspiration has been often profuse; this excessive action of the skin was noticed during her earliest infancy.

Family History.—There is only one other child in the family, a boy, *æt.* 9, who is very weakly in appearance and suffering from a chronic cough: the medical attendant states that his lungs are diseased. The father appears to be in good health; he is by trade a brass-finisher; and sometimes, in consequence of inhaling too closely the acid fumes given off in his unhealthy occupation, he has spit up blood. The paternal grandfather followed the same occupation, and died from consumption. The mother is a thin, and morbidly nervous woman, always ailing: she has one brother and three sisters. The brother, *æt.* 28, has always been weak in the chest, and suffers from strumous abscesses in the neck and elsewhere, which often discharge: he is married and has three children, all of whom appear healthy. The eldest sister has always been strong and healthy; she is married, but has no family. The second sister suffered in early life from water on the brain; she also is married, and without family. The youngest sister is healthy, married, and with a rapidly-increasing family, all of whom are free from disease. The maternal grandfather, who is still living, has consumption. The maternal grandmother, for fourteen years previous to her death, suffered from asthma. It may be mentioned, that the subject of the present case is, by her father's side, cousin to a family of children, in which three brothers are affected with the hæmorrhagic diathesis.

The disease commenced about two years ago, when the first patch appeared on the back, immediately below the right shoulder-blade. Three months afterwards, a second patch was observed on the back below this. These were followed, at shorter intervals, by other patches, limited in the first instance to the back, which at the present time (March 7th), presents seven well-marked patches of the disease in its fully-developed state. About four months ago, a similar patch was observed below the right side of the jaw, and since then, several others have appeared, affecting the front of the body, the neck, the skin behind the right ear, the outer angle of the right lower eyelid, the skin near the root of the hair on the right side of the forehead, and one small patch inside the right ear. A well-marked patch of the disease showed itself lately on the right side of the tongue, and quickly spread along its upper margin towards the tip, near which it curves downwards to the under margin. There is no peculiar hardness in the centre of this patch, which, when the tongue is protruded, might be mistaken for the contraction consequent on some surgical operation, or severe injury from a burn, or corrosion of the part. The total number of patches are fourteen, but some of them are, as yet, imperfectly developed.

The first appearance of the disease is known by the white and glossy appearance of the part affected, and by the skin becoming, as it were, thin and delicate. It then changes in colour to a pale, and rather indistinct yellow, which gradually deepens in tint, and merges into a light brown, or dirty straw-colour, surrounded by a faintly-vascular halo, of a purplish pink or pale lilac hue, which is apt to vary in different patches, and also in the same patch on different occasions; and this variableness in the colour and distinctness of the patches referred to, does not seem to be dependent on the age, the size, or the relative quickness of their growth, but on such conditions as may be supposed to affect generally the supply of blood to the skin. In the fully-formed patches, the halo measures from one-third to one-half of an inch in breadth. The horny centre of the patch is always a subsequent formation, and does not generally appear till about three, four, or even more months after the first morbid change in the skin occurs. It is usually oval in form, and slightly raised above the level of the surrounding skin. This elevation of the nucleus is very perceptible at its edge, which is sharp and well-defined, and feels like a plate of horn let into the skin. Beyond these morbid patches the skin seems to be healthy, and there has been no development of the disease on the extremities, the cicatrices, resulting from the operations referred to on the right leg,

being also free from it. No pain has been felt in any of the patches, and no tenderness complained of even on firm pressure.

The relative development of the keloid patches varies greatly, both as regards their progressive increase of size, and their completeness. Some of those early formed were much slower in attaining maturity, than those which have since appeared; and whilst the former have remained more or less stationary, some of the latter have continued to increase so far as greatly to exceed the others in size. The right sub-maxillary patch, which is a recent formation, has, at the present time, the largest central nucleus, measuring two inches and four-tenths in length, and one inch in breadth: whereas, of the two earliest formed patches on the back below the right shoulder-blade, the nucleus of the upper and first formed patch, measures one inch and six-tenths in length, and four-tenths of an inch in breadth; and that of the second formed patch below this, measures one inch and a-half in length, and six-tenths of an inch in breadth. There is no tendency in any of the patches to become smaller, especially as regards the central horny deposit, which is the distinctive feature of the disease.

The present condition of the child is weak, with steadily increasing emaciation, although the state of the digestive organs seems to be good. The face and neck are much disfigured by the disease, which at first sight, gives the impression of having been caused by burns or scalds.

The treatment adopted has been cod-liver oil, quinine, and subsequently iron.

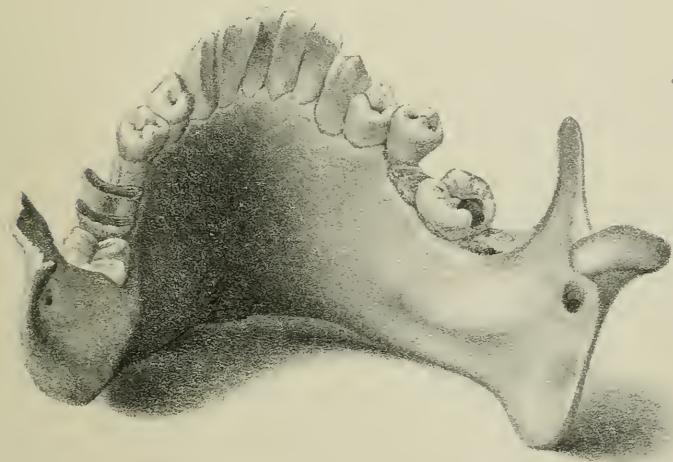
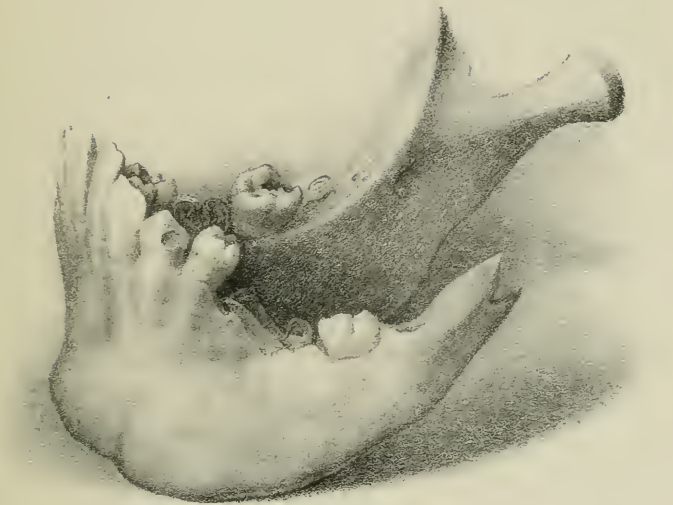
Mr. SEDGWICK, 16th of October, 1860.

Note.—March 18th, 1861. Since the above report, the condition of the child has improved. A subsequent, but slight development of the disease occurred, chiefly on the front of the body; this has remained without any horny centre, and during the last eight or nine months no fresh patches have appeared, and the child's health has undergone a marked change for the better.

The case seems fully to support the opinion advocated by Dr. Addison (*"Medico-Chirurgical Transactions,"* Vol. 37, 1854), respecting the necessity for distinguishing this disease from the keloid of Alibert. Like the four cases cited by Dr. Addison, the disease occurred in a female, and it is further interesting, as the only example as yet observed in which the mucous membrane has shared in the disease, and also for having occurred at an earlier age than any which have been recorded.

DESCRIPTION OF PLATE X.

The Figures illustrate Mr. Canton's case of Arrested Development of the Left Perpendicular Ramus of the Lower Jaw, p. 237.





2. *Arrest of development of the left perpendicular ramus of the lower jaw, combined with malformation of the external ear.*

E. D., æt. 16, extremely small for her age, was admitted into the Charing Cross Hospital for hæmoptysis and general derangement of health. The tonsils were so large and indurated as to cause difficulty in deglutition and respiration. The signs of puberty, as menstruation, development of the mammae, &c., were entirely wanting. She has the appearance of having, always, been extremely delicate; and, although very intelligent, the forehead inclines backwards, which, with the recession of the lower jaw, gives an undue prominence to the portion of face between these two parts, so that the physiognomy reminds the observer very forcibly of that presented by the Aztec children exhibited in London a few years ago. The left side of the face, from below the level of the floor of the orbit, is peculiarly flattened, and shortened in its transverse and vertical measurements.*

The bulk of the corresponding auricle is wanting, but there exists a mere fold of skin to represent it, which is, as it were, crumpled over the meatus auditorius, and conceals this opening from view. The fold of integument is placed about two inches anterior to its normal position, and is divided into two portions, one of which is a malformed tragus. The direction, calibre, and termination of the auditory canal were not ascertained, but the patient could hear on this side, though much less perfectly than through the fellow organ.

The above abnormality existed only on the left side; the right ear was, in all respects, well formed.†

The girl left the Hospital considerably improved in health; but having died at her home a short time afterwards, permission was given to examine the face, when the lower jaw was removed by Mr. Canton, and its peculiarities are shown in the accompanying lithograph (Pl. X.). No careful dissection was allowed to be made, and hence the following points only could be hastily ascertained:—flattening of pars squamosa of temporal bone; absence of zygomatic and auditory processes; a per-

* "In most cases of deformity of the external ear and meatus, a peculiar square shape of the face has been observed, the lower jaw being very short; and there is also, not unfrequently, imperfect speech and deglutition" (p. 19).

† "Fritelli and Overteuffer are quoted by S. Cooper as having seen cases in which the outer ear was entirely absent. The former says the physiognomy of the child resembled that of an ape, and the latter states that his patient heard very well" (p. 14).—Toynbee "On the Ear."

† "The auricle is sometimes represented by a mere fold of skin. I once saw such a case; it occurred in an infant, and existed only on one side."—Wilde, "Aural Surgery," p. 197.

fectly flat, smooth surface to represent the glenoid cavity; imperfect development of the mastoid process; the malar bone complete, but flattened.

With respect to the peculiarities of the inferior maxillary bone, I am indebted to Mr. Tomes for the following account of them:—"Kölliker was, I believe, the first to point out the fact, that the thick coating of articular cartilage of the condyle is, in the earlier periods of life, subservient to the purpose of growth in the length of the jaw; much in the same manner as the cartilage which separates the epiphysis and apophysis of long bones affords the means for their elongation. This point, in respect of the jaw, has been worked out by myself, and a considerable space devoted in showing that the vertical development of the jaws is secondary to and dependent upon the development of the teeth.* The specimen, under consideration is capable of proving the correctness of the views. The figures will show that the articular process has, on the one side, been preserved, and the development of the ramus maintained; while, on the other side, the articular process has been lost, and the development of the posterior section of the jaw arrested. But, on each side, the development in the vertical direction (namely, that dependent upon the presence of the teeth) has been continued. The right side of the jaw, although normal in form, is below the size due to the age, as indicated by the presence of the second permanent molar; and if measured along the inferior border would compare with that of a child eight or nine years old—a peculiarity due to the absence of a proper development of the mental prominence, and to a feeble production of the inferior border generally. The great elevation of the incisor teeth, and the corresponding elevation of the alveolar processes are the invariable consequence of imperfect antagonism of the front teeth in the upper and lower jaws. That this condition prevailed in the present case is shown by the preservation of the serrated margins of the incisors. Had the antagonism been perfect, these serrations would have been worn off within two years after the teeth came into use.

"Excepting only the wisdom teeth, the series of the permanent teeth is complete, and their arrangement is much more regular than the size of the jaw would allow, but for the elevation of the incisors. Measurement shows that the arch into which they are raised permits their present arrangement. Were they pressed down to the level of the bicuspid and molar teeth, one or other of the incisors must fall out of the line. As it is, the bicuspid are forced backwards into the space provided by the loss of the crowns of the first permanent molars.

"The great peculiarity of the specimen consists in the absence of the

* "Dental Surgery."

ascending ramus of the left side of the jaw, and in the deficiency of the lower border, as shown in the first of the two figures. Two small processes immediately behind the second permanent molar represent the ascending ramus, and coronoid and condyloid processes. They terminate in points destitute of any vestige of articular surface. At the base of the anterior process is a crypt which has been occupied by the formative pulp of the wisdom tooth.

“The left side of the jaw, measured from the space between the central incisors to the posterior surface of the abortive ramus, does not exceed in extent that which will be found in a corresponding measurement of the jaw of a child two years and a-half old. On comparison with the inferior maxilla of that age it is quite possible to conceive how the existing condition might be produced, if the articular process were then lost, and the masseter and temporal muscles thrown into disuse. This side of the jaw would, in the absence of an ascending ramus, be probably dragged upwards, and probably too, with this position of the jaw, lean over towards the opposite side, and thus produce the twisted appearance shown in the second figure. The absence of any indication of diseased action in the jaw itself, and the total want of any authentic history, leave it quite impossible to determine the cause which formed the first link in the chain of circumstances which have terminated in producing this remarkable defect.”

Mr. E. CANTON, 4th of December, 1860.

3. *Cast of the mouth of a female child, the subject of hereditary syphilis.*

Mr. Nunn exhibited a cast from the mouth of a female child, æt. 10, as evidence on the question of the influence of syphilitic taint in modifying the development of the permanent teeth; and especially with reference to the statement made by Mr. Hutchinson in the tenth volume of the “Transactions of the Society,” at p. 294, as follows:—

“We shall find here, again, that the stress of the disease falls on the upper central incisors. I cannot too strongly insist, that this pair are the test teeth as regards hereditary syphilis. Other teeth may, and most commonly do, furnish corroborative testimony, but it is in the upper central incisors that peculiarities are often observed, which I have never yet seen in a similar degree, excepting in the subjects of the disease in question.”

In the cast exhibited, the teeth of the *lower* jaw presented nothing whatever special, but in the upper jaw the two central incisors were to a considerable degree “peg-shaped.” The left one was on a plane anterior

to the right; between the two was a gap about the sixteenth of an inch in width. The teeth in question converged; the right presented towards its cutting edge a very marked deficiency in the thickness of the enamel.

The cutting edges of the two teeth presented a central projecting lobule.

The lateral incisors, having only reached an imperfect stage of their evolution, offered nothing that could be considered definite in respect of their syphilitic character.

Mr. NUNN, 5th of March, 1861.

4. *Outgrowth of nails in a woman, at. 84.*

This woman died of natural decay, after a residence of many years in the St. Giles's Workhouse. Her body was brought to King's College for anatomical examination. The nails of *all* the toes of *both* feet were longer than natural, those of the great toes being the longest.

The toes themselves were of their natural size, and their integuments and nail-glands were quite healthy.

The nails of the great toes were much curved outwards with an upward twist; the nails of the other toes either curved inwards or had a waving direction forwards.

All the nails were rough and coarse, and the larger ones were disposed to be broken up on their under surface into distinct brush-like fibres. The scales on their dorsal surface were marked by transverse ridges, and were friable towards the extremities; those on the outer surface were easily separable, and were filled with dirty secretions.

No lunulæ were observable on any of the nails.

On the great toes, that part of the nail which covered the toe was smooth, compact, and natural in appearance.

The cuticle at the roots of the nails overgrew them more than usual, and was turned up loosely from their surfaces. A section of one of the great toes showed nothing abnormal either in the toe, root of the nail, or in its nail-gland.

Dimensions of nails:—

Right foot.		Left foot.	
	inches.		inches.
1st toe	6	1st toe	4
2nd „	$1\frac{1}{2}$	2nd „	$0\frac{1}{2}$ *
3rd „	$2\frac{3}{8}$	3rd „	$1\frac{3}{4}$
4th „	$1\frac{3}{4}$	4th „	$1\frac{3}{8}$

* This nail had been broken.

The nails of the fifth toes were not much longer than natural, and were not measured.

Mr. PARTRIDGE, 2nd of April, 1861.

5. *Diphtheria—larynx and trachea.*

This specimen was sent to Dr. Harley by Dr. Newman, of Fulbeck, who removed it from a child, æt. 3.

History.—Three children, aged respectively 7, 5, and 3 years, were attacked with diphtheria about the 28th of April; the two elder children recovered; the youngest, a girl, when first seen, was suffering from considerable constitutional disturbance, and had both tonsils covered with exudation, which extended slightly upwards on the palate. During some days the case progressed favourably; but on the fifth, there was an increase of febrile symptoms, and towards evening the patient was attacked with difficulty of breathing, the face becoming quite livid. These untoward symptoms gradually increased, until the child sank, dusky and comatose, on the evening of the sixth day of the disease.

Post-mortem examination.—On removing the larynx and trachea, the tonsils, as well as the whole pharynx, were found covered with a dense layer of exudation; and on opening the trachea, the false membrane was found to extend as a perfect cast down the trachea as far as its bifurcation. The œsophagus, on the other hand, was perfectly free from the disease, the false membrane on the pharyngeal wall ceasing at a point nearly opposite to the vocal cords.

Microscopical examination.—On placing a piece of the membrane under the microscope, it is found to consist almost entirely of cells (Plate IX., Fig. 10 *a*), some of which are of considerable size, and contain both nuclei and granules. The nuclei vary in number from one to three (Fig. 10 *b*). When only one nucleus is present, it is in general large, and occasionally possesses a nucleolus (Fig. 10 *c*). Scattered over the field of the microscope are a number of granules, probably the escaped contents of broken cells. In no part of the membrane is a network of fibres visible, nor has it the least appearance of a fibrillated structure.

[Dr. Harley had his attention specially directed to this point, as Dr. Bristowe and some other observers had described, not only cells, but fibrinous material—that is to say, a network of fibres like what is found in the inflammatory exudation of serous membranes. Dr. Harley has closely examined several cases of diphtheria, in which there was no fibrinous material, the membrane presenting essentially a cellular

character ; in this respect it seems to him to differ from the false membrane of croup, in which a fibrillated appearance is usually well marked.]

Remarks.—In the above-mentioned case of diphtheria the mode of death was by apnœa. The difficulty of breathing is readily accounted for by the specimen, for the cast lining the trachea is of considerable thickness, and, consequently, especially at the rima of the glottis, must have greatly impeded the respiratory process. The house in which the cases occurred, though in itself good, is in the midst of defective sanitary arrangements, some open-drains, which are at times exceedingly offensive, running close to it.

Dr. GEORGE HARLEY, 21st of May, 1861.

6. *Cast of a deformity of jaw and teeth from a child, æt. 9, caused by sucking the thumb.*

The little girl from whom this cast was taken has sucked her thumb, under the author's observation, until the present moment, in spite of great efforts which have been made of late to cure her of the habit. The upper incisors are forced considerably forward, the lower are pressed somewhat backward, the edges of the lower are defective and roughened.

She is very thin, pale and weak, and her appetite is particularly defective.

Mr. THOMAS BALLARD, 21st of May, 1861.

XI.—SPECIMENS FROM THE LOWER ANIMALS.

1. *Intus-susception and impaction of the bowels of a horse, producing death in forty-eight hours.*

Warwick, a small black horse, recently the property of Lieut. Knipe, 61st Regiment, was hunted a few times during the last month, but, there being no very lengthened run, was not overpressed or fatigued beyond his strength at any time before or since he came into that officer's possession. He appeared to enjoy his usual health and spirits up to, and during, the morning of Wednesday, the 19th of December, 1860, when about nine A.M. he suddenly became restive and fidgety, and immediately afterwards, exhibited symptoms of uneasiness and griping of the

stomach. He soon grew much worse, and when seen by me about half-past ten, he could scarcely be made to stand, move, or lie down, but was in a constant state of writhing, commotion and excitement; kicking furiously against the wall, the enclosures of his stall, and other neighbouring objects. He was sweating profusely from all parts of his body, the breathing was quick, hurried, and occasionally snorting; and he appeared suffering so severely from inward tormina and spasm that I at once diagnosed fæcal impaction or intus-susception, and expressed myself accordingly to my colleague, Mr. Wolseley, and the other officers present.

A farrier having arrived in the meantime, he was bled with difficulty, but very freely, and apparently with some slight relief. Enemata of soap-water and laudanum were liberally administered; he was made to swallow an ounce of tincture of opium, and subsequently had some colic drink, gin and spirits of nitre. He appeared to improve for a time, and we had some expectations of his ultimate recovery, but after spending a restless night, the spasms returned towards daybreak, and he died at nine A.M., the following morning, about the same time as that in which he was attacked the day previously.

On section four hours after death, and after dividing an enormous mass of adipose tissue, we found the intestines dreadfully distended, tympanitic and flatulent, containing in almost every part, large concrete masses of half-digested fæculent matter, and exhibiting extensive patches of extravasated blood throughout the whole range and length of their free or mucous surface. On dipping deeper into the stomach, we suddenly came on the specimen here exhibited, which was of a dark-red, semi-gangrenous colour, packed tightly, mingled or twisted in itself like a coiled snake, and enveloped in a larger fold of stomach or intestine. This on careful examination proved to be intus-susception of a portion of the small intestine, to the extent of about twelve inches. The stomach contained a large number of larvæ of the fly, which were adherent to the mucous membrane.

DR. GIBB, for Mr. W. CURRAN, 1st of January, 1861.

2. *Laryngitis in a white-lipped Peccary (Dicotyles labiatus).*

This animal died in the Zoological Gardens on the 25th of February. For some days it was observed to have great difficulty in swallowing its food, which it subsequently refused, and then died. After death this was explained by finding the throat and fauces, generally, red and inflamed, with extension of the inflammation to the whole of the

larynx, the interior of which was of a dark purplish-red colour, interspersed here and there with ashy-grey patches. In spots the mucous membrane was in a sloughy condition, and readily peeled off. The posterior surface of the epiglottis was bright-red, and the epiglottidean folds and superior vocal cords were in a state of œdema. The animal evidently died of acute laryngitis. Dr. GIBB, *5th of March*, 1861.

3. *Cartilages of Wrisberg in the larynx of a Mona monkey (Cercopithecus Mona).*

The larynx from this monkey was exhibited for the purpose of showing a considerable development of the cuneiform, or Wrisbergian cartilages, in the fold of mucous membrane, situated between the arytenoid cartilages and epiglottis. These small bodies are known to be either very minute and rudimentary, or wholly wanting in man.

Dr. GIBB, *5th of March*, 1861.

4. *Case of fatal parturient hæmorrhage in a cat.*

The history of the animal, the subject of this observation, was not known antecedent to eight months ago. Since that time she had inhabited the house of the author. The cat was considered to be old, those familiar with the animal judging this to be the case from the fact that she experienced difficulty in eating bones and hard substances, from the apparently defective power in the teeth.

During the last eight months the cat had been pregnant—exclusive of the present occasion—twice, on one occasion giving birth to four kittens, only one of which lived more than one day, and on another, after a tedious labour, giving birth to three kittens.

On the evening of February 24th, 1861, the animal was again taken in labour, and one kitten was found born on the following morning. During the 25th the cat was restless, uneasy, and lost from time to time a considerable quantity of blood, moving from one place to another, and seeking relief. In the evening two more kittens were born. The cat was left with her kittens at night, and on the following morning (the 26th) she was found in the basket dead; a considerable quantity of blood, the source of which was evidently the uterus, was found in the basket also. Dr. Graily Hewitt had heard nothing of the cat's condition until informed that she was dead. On examining the body a few hours after death, it was found rigid, the limbs and thorax attenuated to a great extent, but the abdomen still much distended. The posterior ex-

trémities of a kitten projected from the vulva. On opening the abdomen the uterus was found to contain three kittens, one partially delivered, one in the lower part of the uterus, and partially in the right horn of that viscus, and a third altogether in the left horn of the uterus. There was a placenta, detached, in the right horn of the uterus; the placenta of the foetus in the left horn was also disconnected from the uterus, and it appeared as if there had been recent escape of blood from the uterus at this point, although no coagula of any size were found there. The thickness of the uterus at the junction of the two horns was apparently less than it should be, judging from a comparison instituted between it and some preparations of the pregnant uterus of the cat in the Hunterian Museum, but the difference is not anything very considerable in amount. Under the microscope the muscular fibres of the uterus at this point did not present any evidence of fatty degeneration. There was considerable congestion of the vessels supplying the right horn of the uterus, but less on the other side.

The omentum contained much fat. There was a considerable collection of fat also around what may be called the brim of the pelvis.

The case was analogous, the author believed, to those witnessed in the human female, when advance in years was known to bring with it an increased tendency to the occurrence of parturient hæmorrhage. There appeared to be no reason why the kitten found partially delivered should not have been expelled as easily as the others; the cause was, in all probability, a weak condition of the uterus. How far the presence of a large amount of fat in the pelvis, observed in this case, influenced the result, it would be difficult to say.

Dr. GRAILY HEWITT, 19th of *March*, 1861.



INDEX.

Abdominal parietes, fistulous orifice in	85	Aorta (ascending) small sacs in	73
Abdominal section for the relief of intestinal obstruction -	117	Aortic valves, retroversion of one of	59
Abscess in cerebellum, from molluscous tumour -	1	Apnoea, death by, in case of extravasation of blood into the pons Varolii	6
„ — in case of necrosis of petrous bone -	13	Apoplexy, with peculiar tetanic spasm	2
Acid, nitric, poisoning by	114	Arteries, calcification of -	162
ADAMS (Mr. W.), Epithelial cancer of the lower jaw—excision of half the bone -	202	„ of limbs, spontaneous coagulation of blood in -	81
„ termination of the same case	204	Artery, axillary, laceration of internal coats -	167
„ — report on ditto, by Dr. Wilks and Mr. Holmes -	205	„ internal carotid, aneurism of -	61
„ report on Mr. Holmes' case of congenital tumour of the neck -	207	„ middle cerebral, obstruction, with hemiplegia, etc. -	20
Amaurosis, in tubercular disease of cerebellum -	17	„ inferior mesenteric, aneurism of	73
Amputation ten months after excision of the knee -	171	„ popliteal, two specimens of deviation of, from its course -	68
Anæmia, extreme, in case of chronic enlargement of lymphatic glands and spleen -	230	„ pulmonary, enlargement of, in contraction of mitral orifice -	70
ANDREW (Dr. Edwyn), Infiltrated scirrhous stricture of the œsophagus, implicating the trachea -	99	„ — enlargement of, with bronchial disease -	78
„ — appendix to ditto by Dr. Gibb	100	„ subclavian, ulceration into, in disease of œsophagus -	108
Aneurism of the apex of the left ventricle of the heart -	69	Arthritis, chronic rheumatic, of hip, elbow, etc. -	162
„ small, in left ventricle -	75	Arytenoid, calcification of	51
„ of the aorta, and rupture into pericardium -	71	ASHTON (Mr. T. J.), report on Dr. Schulhof's case of a cancerous growth surrounding the rectum	91
„ dissecting, of aorta -	67	BALLARD (Mr. Thomas), fibrinous cast of the rima glottidis -	56
„ of internal carotid artery in the cavernous sinus -	61	„ cast of a deformity of jaw and teeth from a child, æt. 9, caused by sucking the thumb -	242
„ of the inferior mesenteric artery	73	BENNETT (Dr. Risdon), obstruction of middle cerebral artery of right side, with hemiplegia and cardiac disease -	20
Aneurisms, mode of formation of	73	„ diseased lung, in connection with central limited empyema -	49
Ankylosis of the hip-joint -	169	„ adherent pericardium, etc. -	78
Anus, imperforate -	87	Blood, spontaneous coagulation of, in the arteries of limbs -	81
„ — the rectum opening into the vagina -	87		
Aorta, aneurism of, and rupture into pericardium -	71		
„ — dissecting -	67		

- Blood, extravasation of, into the crura cerebelli - - - 6
 „ — in pons Varolii - - - 2, 6
 Bones, long, of an aged female dwarf 173
 Bony union of small trochanter and spinous process of the ilium - 169
 „, partial, in comminuted fracture of patella - - - 178
 Brain, weight and specific gravity of 27
 „, *table* of weight of healthy brain, and cause of death in males and females - - - 29
 „, ditto ditto of diseased brains 30
 „, ditto, weight and specific gravity of healthy brain - - - 31
 „, ditto ditto of diseased brains 32
 „, ditto, showing the heaviest, lightest, and mean weights of encephalon, and of its portions at different ages 33
 „, ditto, showing proportion of the encephalon to the body, etc. - 34
 „, ditto, showing highest, lowest, and mean specific gravity of the encephalon - - - 34
 Breast, sero-cystic disease of the - 222
 „, tumour of the - - - 208
 BRISTOWE (Dr. J. S.), tubercular disease of cerebellum, amaurosis, phthisis - - - 17
 „, three cases of tubercular pericarditis 63
 „, ovarian tumour—discharge into abdominal cavity—condition of peritoneum simulating colloid cancer 150
 „, *report* on Dr. Dickinson's case of colloid cancer - - - 93
 „, *report* on Dr. Broadbent's case of sub-peritoneal tumours - 212
 BROADBENT (Dr.), extensive hæmorrhage into substance of cerebral hemisphere after excitement - 15
 „, hæmorrhage into the pons Varolii 16
 „, extensive hæmorrhage into the left hemisphere of the cerebellum 19
 „, Two specimens of malignant disease of the larynx - - - 44
 „, intestinal obstruction by old adhesions, with strangulated femoral hernia, below stricture - 106
 „, inguinal hernia returned “en masse” 107
 „, — *report* on ditto, by Mr. Nunn and Mr. Hulke - - - 107
 „, sub-peritoneal tumours, associated with cutaneous tumours - 210
 „, — *report* on ditto, by Dr. Bristowe and Dr. Broadbent - - - 212
 Bronchi, disease of, with enlargement of pulmonary artery - - - 78
 Bronchial tubes, dilatation of - 58
 Bronchocele, fatal by compression of the trachea - - - 229
 BROWN (Mr. I. Baker) *per Dr. Gibb*, polycystic ovarian tumour of right side, and fibrous tumour of left, removed at one operation - 154
 BRYANT (Mr. Thomas), Syphilitic disease of the skull—epilepsy—trephining - - - 11
 „, sero-cystic disease of the breast 222
 „, *report* on Mr. Holmes' case of amputation after excision of the knee 172
 BUCHANAN (Dr. George), malformation of duodenum in a child - 121
 BUZZARD (Mr. Thomas), stomach of a girl, nine years old, perforated by an ulcer. - - - 84
 CADGE (Mr.), *per Mr. Henry Thompson*, encysted calculus; successful operation - - - 136
 Calcification of the cartilages of the larynx - - - 51
 Calculi, numerous prostatic - 139
 „, uric acid - - - 134
 „, urinary, from urethra, prostate and bladder - - - 133
 Calculus, impacted in a sac at base of bladder - - - 138
 „, in pelvis of a kidney - - - 134
 „, encysted, removed by successful operation - - - 136
 Cancer in the lungs - - - 46
 „, of the œsophagus - - - 101
 „, of the peritoneum, on the surface of the liver - - - 94
 „, of the stomach - - - 88
 „, colloid, case of, illustrating the independent vitality of the cancer cell - - - 92
 „, simulation of, in case of ovarian tumour - - - 150
 „, epithelial, of the lower jaw—excision of half the bone 202-204
 „, — of the tongue - - - 46
 „, excision of the tongue for - 223
 „, melanoid, developed in a common dark mole - - - 206
 „, medullary, of the testis - 147
 „, villous (so-called), of the intestine 113
 Cancer cell, independent vitality of 92
 Cancerous growth surrounding the rectum - - - 90
 Cancerous tumour of larynx, etc. - 56
 „, following recurrent fibroid - 219

- CANTON (Mr. E.), larynx of a man, aged 103 years - - - 53
- „ aneurism of the apex of the left ventricle of the heart - - - 69
- „ comminuted fracture of the clavicle between the coraco-clavicular ligaments and acromio-clavicular joint 161
- „ chronic rheumatic arthritis of hip, elbow, knee, and spine, with calcification of the arteries - 162
- „ the skull, pelvis, and long bones of an aged female dwarf - 173
- „ — *report* on the pelvis, by Mr. John Wood - - - 175
- „ united fracture of cervix femoris at its junction with the shaft 179
- „ arrest of development of left ramus of lower jaw, with malformation of the ear - - - 237
- Cardia, scirrhus of the - - - 95
- Cartilage, necrosed, expectorated in syphilitic laryngitis - 48
- „ cricoid, disease of, in a child - 52
- Cartilages of the larynx, calcification of 51
- „ of Wrisberg in the larynx of a Mona monkey - - - 244
- Cast, fibrinous of, the rima glottidis 56
- Cat, fatal parturient hæmorrhage in a 244
- Cell, cancer, independent vitality of 92
- Cerebellum, abscess in, from molluscous tumour - - - 1
- „ — in case of necrosis of petrous bone - - - 13
- „ extensive hæmorrhage into left hemisphere of - - - 19
- „ scrofulous deposit in - - - 8
- „ tubercular disease of - - - 17
- Cervix femoris, united fracture of, at its junction with the shaft - 179
- Cicatrix, malignant ulcer occurring in a - - - 220
- CIRCULATION, ORGANS OF, diseases, etc., of - - - 59-84
- Clavicle, comminuted fracture of - 161
- Coagulation, spontaneous, of blood in arteries of limbs - - - 81
- Colon, descending, stricture of - 94
- Condyles, complete separation by a vertical split - - - 177
- COPLAND (Dr.), see MARGETSON.
- Cranium of an aged female dwarf 173
- „ fracture of the, in occipital region 167
- „ syphilitic disease of - - - 11
- Cricoid cartilage, disease of, in a child 52
- CRISP (Dr.), villous cancer (so-called) of the intestine - - - 113
- CRISP (Dr.) report on ditto, by Mr. T. Holmes and Mr. J. W. Hulke 114
- „ poisoning by nitric acid - 114
- CROFT (Mr. John), two specimens of deviation of popliteal artery from its course - - - 68
- „ kidney, showing a calculus in its pelvis - - - 134
- Crystals of diabetic sugar - 131
- CURLING (Mr. T. B.), structure and secretions of a testicle detained in inguinal canal - - - 143
- „ undeveloped testicle from the body of an idiot - - - 143
- CURRAN (Mr. William) *per Dr. Gibb*, entire absence of penis from syphilitic ulceration, simulating heremaphrodism - - - 139
- „ *per Dr. Gibb*, intus-susception and impaction of the bowels of a horse, producing death in forty-eight hours - - - 242
- Cyst in fibro-muscular uterine polypus 148
- „ ovarian, fatal by spontaneous rupture - - - 155
- „ ovarian, removed by ovariectomy (seven cases) - - - 156
- DAVIS (Dr. F. W.) stricture of the œsophagus from malignant disease 104
- „ — *report* on ditto, by Mr. Nunn and Mr. Hulke - - - 105
- „ malignant ulcer occurring in a cicatrix - - - 220
- „ — *report* on ditto, by Mr. Nunn and Mr. Hulke - - - 221
- Deformity of jaw and teeth, from sucking the thumb - - - 242
- Delirium tremens, internal cranial exostosis fatal from - - - 23
- Development, arrest of, in left ramus of lower jaw - - - 237
- Diabetic sugar, crystals of - 131
- DICKINSON (Dr.), spontaneous coagulation of blood in the arteries of the limbs - - - 81
- „ case of colloid cancer, illustrating the independent vitality of the cancer cell - - - 92
- „ — *report* on ditto, by Dr. Wilks and Dr. J. S. Bristowe - 93
- „ malignant disease of the œsophagus, ulcerating into subclavian artery 108
- „ case of bronchocele proving fatal by compression of the trachea 229
- „ *report* on Dr. Robertson's case of cancer of the larynx, etc. - 57

- DIGESTION, ORGANS OF, diseases, etc.,
of - - - 84-131
- Dilatation of the bronchial tubes - 58
- Diphtheria, larynx and trachea - 241
- DISEASES, etc., of the nervous system
1-36
- „ of the organs of respiration 36-58
- „ of the organs of circulation 59-84
- „ of the organs of digestion 84-131
- „ — 1. pharynx, œsophagus, stomach, and intestines - 84-129
- „ — 2. Liver and pancreas 129-131
- „ of the genito-urinary organs 131-158
- „ — 1. Kidneys, bladder, calculi, etc.
131-139
- „ — 2. Genital organs, male 139-148
- „ — 3. Ditto, female 148-158
- „ of the osseous system - 159-200
- „ of the organs of special sense
201-202
- „ tumours, cysts, etc. - 202-224
- „ ductless glands - - 224-233
- „ miscellaneous specimens, including
malformations of external parts,
diseases of skin, diphtheria, etc.,
234-242
- „ specimens from the lower animals
242-245
- Dislocation, traumatic, of shoulder-joint,
pathological changes from - 179
- „ table of specimens of ditto in the
Anatomical Museums of London
189
- Duodenum, perforation of muscular
coat of, from typhoid fever - 96
- „ congenital stricture of - 101
- „ malformation of, in a child - 121
- DURHAM (Mr. Arthur), disease of the
cricoid cartilage, in a child - 52
- „ misplacement of right kidney, probably
from peri-nephritis - 135
- „ parts removed in excision of the
elbow-joint - - - 162
- „ tumour of probably cancerous nature,
following recurrent fibroid
219
- „ — report on ditto, by Dr. Wilks and
Mr. Durham - - - 219
- Dwarf, aged female, skull, pelvis, etc.,
of - - - 173
- Ear, serous discharge from, in case of
fracture of condyle of the lower-
jaw - - - - 159
- „ external, malformation of - 237
- Elbow-joint, excision of, parts removed
in - - - - 126
- Embolism of one of cerebellar arterial
branches - - - - 4
- Empyema, diseased lung in connection
with - - - - 49
- Epiglottitis, dislocation of, by cancerous
tumour of larynx - - - 56
- Epilepsy, from syphilitic disease of the
skull - - - - 11
- „, internal cranial exostosis in - 23
- Excision of half the lower-jaw in case
of epithelial cancer - 202-204
- „ of tumour and portion of lower-jaw
217
- „ of the entire tongue for epithelial
disease - - - - 223
- „ of the elbow-joint, parts removed in
162
- „ of knee-joint - - - - 176
- „ — amputation after - - - 171
- Exostosis, internal cranial, in epilepsy
23
- „ of vertebræ - - - - 101
- Femur, comminuted fracture of - 177
- FERGUSON (Mr. Wm.), urinary calculi
from the urethra, prostate, and
bladder - - - - 133
- Fibrin, extensive deposit of, in cavities
of the heart - - - - 79
- FIDES (Mr.), *per Mr. Henry Thompson*,
Excision of the entire tongue for
epithelial disease - - - 223
- „ — report on ditto, by Mr. Hutchinson,
Mr. H. Thompson, and Mr.
Lawson - - - - 223
- Fistulous orifice in abdominal parietes,
opening into cavity communicating
with colon and duodenum - 85
- FLOWER (Mr. W. H.), Pathological
changes in shoulder-joint by traumatic
dislocation - - - - 179
- „ — table of specimens of complete
dislocation of the humerus in the
Anatomical Museums of London
189
- Fracture, comminuted, of the femur 177
- „ united, of cervix femoris at its junction
with the shaft - - - 179
- „ of the occiput - - - - 167
- „ comminuted, of the patella - 178
- „ — of the patella, partial bony union
178
- FRANCIS (Dr.), *per Mr. J. C. Langmore*,
imperforate anus - - - 87
- GENITO-URINARY ORGANS, diseases,
etc., of - - - - 131-158
- „ male, diseases of - - - 139-148
- „ female, diseases of - - - 148-158
- GIBB (Dr.), internal cranial exostosis
in epilepsy, fatal from delirium
tremens - - - - 23
- „ necrosed cartilage expectorated in
syphilitic laryngitis—use of laryngoscope
- - - - 48

- GIBB (Dr.) calcification of the cartilages of the larynx, including the arytenoid - - - 51
 „ crystals of diabetic sugar - 131
 „ laryngitis in a white-lipped Pecary - - - 243
 „ cartilages of Wisberg in the larynx of a Mona monkey - - 244
 „ appendix to Dr. E. Andrew's case of scirrhus stricture of œsophagus - - - 99
 „ report of Dr. Robertson's case of cancer of the larynx, etc. - 57
 „ see BROWN, CURRAN.
- Glands, enlargement of - - 213
 „ lymphatic, chronic enlargement, with anæmia - - - 230
- GLANDS, DUCTLESS, diseases of 224-233
- Hæmorrhage into the pons Varolii 16
 „ extensive, into cerebral hemisphere after excitement - - 15
 „ extensive, into left hemisphere of cerebellum - - - 19
 „ fatal parturient, in a cat - 244
- HARE (Dr.), chronic calculous pyelitis, with dilatation of the calyces of the kidneys - - - 135
 „ enlarged thymus gland, in case of laryngismus stridulus - 227
 „ report on Mr. Part's case of hypertrophied spleen - - 225
- HARLEY (Dr. Geo.), diphtheria, larynx, and trachea - - - 241
 „ report on Mr. Jeaffreson's case of large gall-stone ejected by vomiting - - - 129
- Heart, aneurism of the apex of the left ventricle of - - - 69
 „ disease of, with obstruction of middle cerebral artery - - 20
 „ extensive deposit of fibrin in cavities of - - - 79
 „ rupture of the left ventricle of 72
- Hemiplegia on right side of body, from scrofulous deposit in right hemisphere of cerebellum - 8
 „ in obstruction of middle cerebral artery - - - 20
- Hermaphroditism, simulated, from syphilitic ulceration - - 139
- Hernia, congenital diaphragmatic, allowing intestines to pass into the thorax - - - 115
 „ femoral, strangulated, with intestinal obstruction - - 106
 „ inguinal, returned "en masse" 107
- HEWITT (Dr. Graily), fatal parturient hæmorrhage in a cat - 244
- HILLIER (Dr. Thomas), communication between ventricles—tubercular peritonitis, and ulceration of bowels 76
 „ Congenital diaphragmatic hernia, allowing nearly all the intestines to pass into the thorax - 115
- HINTON (Mr. J.), ulceration of the fibrous lamina of the membrana tympani - - - 201
- Hip-joint, ankylosis of - - 169
- HOLMES (Mr. T.), aneurism of the internal carotid artery in the cavernous sinus - - - 61
 „ cancer of the peritoneum, on the surface of the liver - - 94
 „ internal strangulation of small intestine by pressure of a ring formed by union of appendices epiploicæ from sigmoid flexure - 111
 „ villous tumours of the rectum 120
 „ sequel to the case of removal of a testicle in a young child (in Vol. XI., p. 161 of *The Transactions*) 145
 „ ditto ditto (in Vol. XI. p. 165) 146
 „ fracture of the neck of the condyle of the lower jaw, etc., serous discharge from the ear - - 159
 „ laceration of the two internal coats of the axillary artery - 167
 „ fracture of the skull in the occipital region, with laceration of the torcular herophili - - 167
 „ bones from a case of amputation ten months after excision of the knee - - - 171
 „ — report on ditto, by Mr. T. Bryant, Mr. T. Holmes, and Mr. J. W. Hulke - - - 172
 „ congenital tumour of the neck 206
 „ — report on ditto, by Dr. Ogle, Mr. W. Adams, and Mr. Holmes 207
 „ report on Dr. Crisp's case of villous cancer - - - 114
 „ report on Mr. W. Adams' case of epithelial cancer of lower jaw 205
- Horse, intus-susception and impaction of bowels in, death in 48 hours 242
- HULKE (Mr. J. W.), excised knee-joint - - - 176
 „ report on Dr. Davis' case of stricture of the œsophagus - - 105
 „ report on Dr. Broadbent's case of inguinal hernia - - 107
 „ report on Dr. Crisp's case of villous cancer - - - 114
 „ report on Mr. Holmes' case of amputation after excision of the knee - - - 172
 „ report on Dr. Davis' case of malignant ulcer in a cicatrix - 221

- HUTCHINSON (Mr. Jonathan), epithelial cancer of the tongue—cancer in the lungs - - - 46
 „ medullary cancer of the testis 147
 „ chronic enlargement of the lymphatic glands and spleen, with extreme anæmia - - - 230
 „ *report* on Mr. Fiddes' case of excision of the tongue - - 223
 Hydrocephalus, chronic, after birth 23
 Hyoid bone, dislocation of, by cancerous tumour of larynx - 56
 Hypertrophied spleen - - 224
- Idiot, undeveloped testicle from body of an - - - 143
 Ileum, tubercular ulceration of - 64
 „ internal strangulation of - 103
 „ internal strangulation of, from its passage through the mesentery of the appendix vermiformis - 110
 Inflammation of spinal cord - 9
 „ closure by, in rupture of aneurism into pericardium - - 71
 Inguinal canal, testicle detained in 143
 Intestines, villous cancer (so-called) of 113
 „ intus-susception and impaction of, in a horse, death in 48 hours 242
 „ obstruction of, abdominal section for relief of - - - 117
 „ — by old adhesions, with femoral hernia - - - 106
 „ ulceration of - - - 76
 „ presenting cicatrices and unhealed ulcers, etc., from typhoid fever 96
 „ small, internal strangulation of, by ring formed by union of appendices epiploicæ - - - 111
 Intus-susception of bowels in a horse, death in 48 hours - - 242
- JACKSON (Mr. V.) *per Mr. H. Thompson*, cancer of the stomach - 88
 Jaw, deformity of, from sucking the thumb - - - 242
 „ lower, arrest of development of left ramus of - - - 237
 „ — epithelial cancer of, excision of half the bone - - 202-204
 „ — excision of portion of - 217
 „ — fracture of the neck of the condyle of - - - 159
- JEAFFERSON (Mr. G. E.), *per Mr. H. Thompson*, large gall-stone ejected by vomiting - - - 129
 „ — *report* on ditto, by Dr. Harley 129
- Jejunum, transverse laceration of, from a blow; no effusion into peritoneal cavity - - - 109
- Keloid, true - - - 234
 KIDNEYS, bladder, etc., diseases of 131-139
 Kidney, with a calculus in its pelvis 134
 „ dilatation of calyces of, in pyelitis 135
 „ misplacement of right, probably from peri-nephritis - - 135
 Knee-joint, excised - - 176
 „ amputation of, after excision - 171
- Laceration of internal coats of the axillary artery - - - 167
 „ of the torcular herophili - 167
 LANGMORE (Mr. J. C.), *see FRANCIS*.
 Laryngismus stridulus, case of, with enlarged thymus gland - 227
 Laryngitis in a white-lipped Peccary 243
 „ syphilitic, necrosed cartilage excorporated in - - - 48
 Laryngoscope, use of, in diagnosing the glottis - - - 48
 Larynx of a man, aged 103 years - 53
 „ malignant disease of - - 44
 „ cancerous tumour of - - 56
 „ cartilages of, calcification of - 51
 „ of a Mona monkey, cartilages of Wrisberg in - - - 244
- LAURENCE (Mr. J. Z.), bony degeneration of the contents of an eyeball - - - 201
 „ — *report* on ditto, by Mr. Laurence 201
- LAWSON (Mr. George), abdominal section for the relief of intestinal obstruction - - - 117
 „ comminuted fracture of the femur, with complete separation of the condyles by a vertical split 177
 „ *report* on Mr. Fiddes' case of excision of the tongue - - 223
- LEARED (Dr.), scirrhus of the cardia and œsophagus - - - 95
 „ uric acid calculi - - - 134
- LEE (Mr. Henry), extensive deposit of fibrin in the heart - - 79
- LIVER AND PANCREAS, diseases of 129-131
 Liver, syphilitic disease of - 216
 Lung, diseased, in connection with central limited empyema - 49
 „ cancer in - - - 46
 „ siliceous matter in, in millstone-makers' phthisis - - - 36

- Lymphatic glands, chronic enlargement of, with anæmia - - - 230
- Malformation of duodenum, in a child 121
- MARGETSON (Mr.), *per Dr. Copland*, stricture of the descending colon 94
- Meatus auditorius, displacement of fragment of lower jaw into - 159
- Melanoid cancer, developed in a common dark mole - - - 206
- Membrana tympani, ulceration of fibrous lamina of - - - 201
- Membrane, mucous, of the womb, exfoliation of during menstruation 149
- Menstruation, exfoliation of mucous membrane of womb during - 149
- Mesenteric glands, sloughing of, from typhoid fever - - - 96
- Mesentery of the appendix vermiformis, passage of the ileum through 110
- Millstone-makers' phthisis—siliceous matter found in the lungs - 36
- Mitral valve, destruction of chordæ tendinæ of - - - 59
- Monkey, cartilages of Wrisberg in the larynx of a Mona - - - 244
- MONTGOMERY (Dr. Edmund), two specimens of accessory pancreas 130
- „ *report* on Dr. Thurnam's case of calcified tumour of abdomen 158
- Mouth of a female child, the subject of hereditary syphilis, cast of - 239
- MURCHISON (Dr.), fistulous orifice in abdominal parietes, opening into cavity communicating with colon and duodenum - - - 85
- „ *report* on Dr. Schulhof's case of a cancerous growth surrounding the rectum - - - 91
- Myelitis - - - 9
- Nails, outgrowth of, in a woman, æt. 84 240
- Neck, congenital tumour of - 206
- Necrosis of petrous bone—abscess in cerebellum - - - 13
- Nephritis (peri-) misplacement of right kidney, consequent on - 135
- NERVOUS SYSTEM, diseases, etc., of 1-36
- NESBITT (Mr.), *per Mr. H. Thompson*, rounded body in peritoneal cavity, removed at an operation for hernia 89
- „ — *report* on ditto, by Dr. Wilks and Mr. John Wood - - - 90
- Neuromata, multiple - - - 1
- Nitric acid, poisoning by - 114
- NUNN (Mr.), cast of the mouth of a female child, the subject of hereditary syphilis - - - 239
- „ *report* on Dr. Davis' case of stricture of the œsophagus - 105
- „ *report* on Dr. Broadbent's case of inguinal hernia - - - 107
- „ *report* on Dr. Davis' case of malignant ulcer in a cicatrix - 221
- Œsophagus, malignant disease of, ulcerating into subclavian artery 108
- „ cancer of the - - - 101
- „ scirrhus of - - - 95
- „ infiltrated scirrhus stricture of, implicating the trachea - - 99
- „ stricture of, from malignant disease 104
- OGLE (Dr. John W.), apoplexy, with peculiar tetanic spasm, etc. - 2
- „ atrophic softening of the pons Varolii and embolism of cerebral arterial branch - - - 4
- „ extravasation of blood into pons Varolii and one of the crura cerebelli, &c. - - - 6
- „ scrofulous deposit in right hemisphere of cerebellum, hemiplegia on corresponding side of the body, etc. 8
- „ ankylosis of the hip-joint, bony union between small trochanter and spinous process of ilium - 169
- „ *report* on Mr. Holmes' case of congenital tumour of the neck - 207
- OSSEOUS SYSTEM, diseases, etc., of 159-200
- Outgrowth of nails in a woman, æt. 84 240
- Ovarian cyst, fatal by spontaneous rupture - - - 155
- Ovarian cysts and tumours removed by ovariectomy - - - 156
- Ovarian tumour—discharge into abdominal cavity - - - 150
- „ — of right, and fibrous tumour of left side, removed at one operation 154
- Ovariectomy, seven cases of - 156
- Ovary, right, portion of tumour attached to - - - 153
- Pancreas, with destruction of areolar tissue from typhoid fever - 96
- „ two specimens of accessory - 130
- PART (Mr. James), hypertrophied spleen - - - 224
- „ — *report* on ditto, by Dr. Hare 225

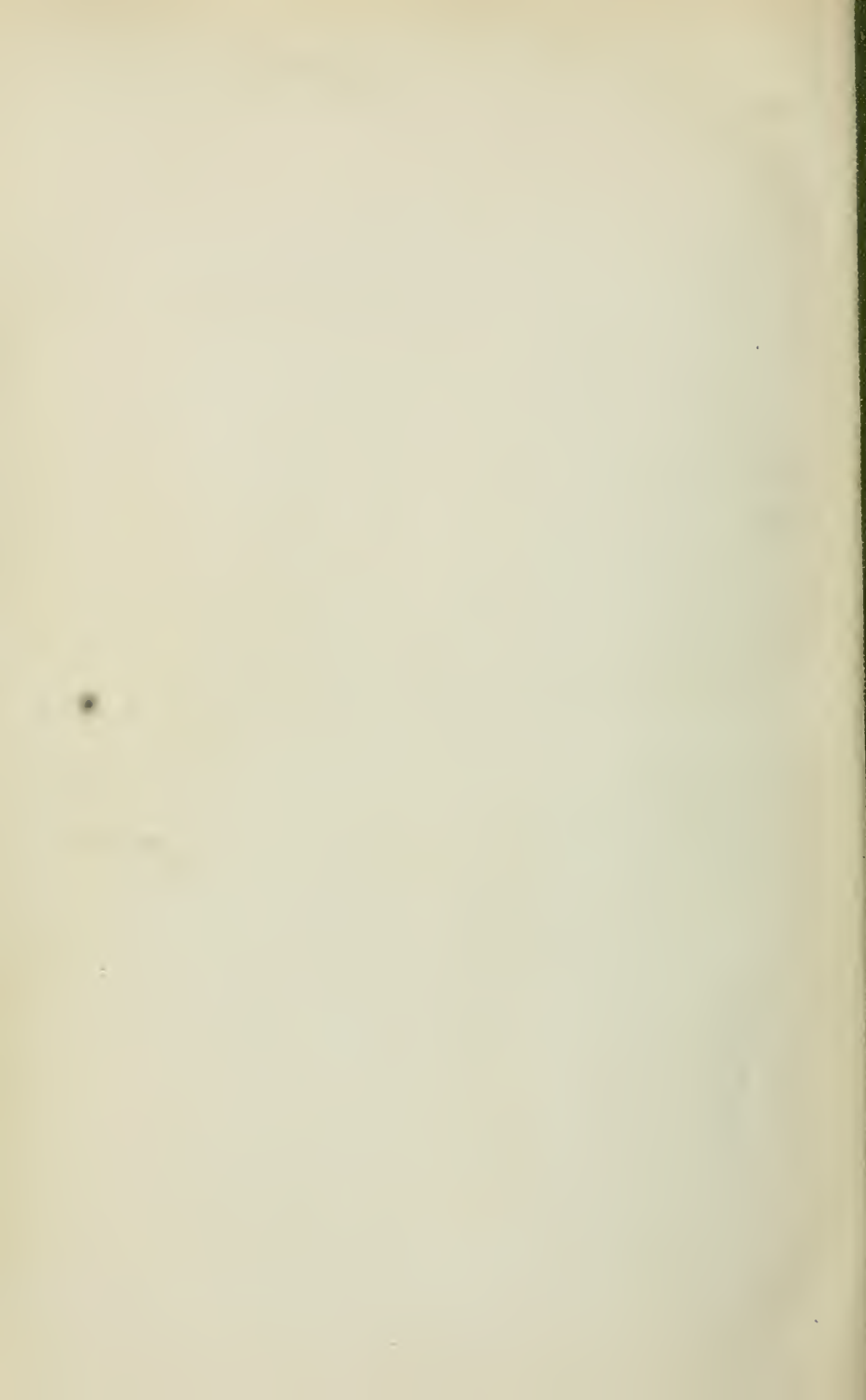
- PARTRIDGE (Mr. R.). transverse laceration of jejunum, from a blow, etc., without effusion into peritoneal cavity - - - 109
 ,, internal strangulation of the ileum from its passage through mesentery of appendix vermiformis - 110
 ,, comminuted simple fracture of the patella, recent - - - 178
 ,, comminuted simple fracture of the patella, partial bony union - 178
 ,, outgrowth of nails in a woman, æt. 84 - - - - 240
 Patella, comminuted fracture of - 178
 ,, — ditto, partial bony union - 178
 PEACOCK (Dr. T. B.) On the weight and specific gravity of the brain (*with tables*) - - - 27
 ,, millstone-makers' phthisis—siliceous matter found in the lungs 36
 ,, retroversion of one of the aortic valves, and destruction of the chordæ tendineæ of mitral valve 59
 ,, aneurism of superior mesenteric artery, with small sacs in the ascending aorta - - - 73
 ,, obstructive disease of aortic and mitral valves, small aneurism in left ventricle - - - 75
 ,, see THURNAM.
 Peccary, laryngitis in a white-lipped 243
 Pelvis of an aged female dwarf - 173
 Penis, entire absence of, from syphilitic ulceration, simulating hermaphroditism - - - - 139
 Pericarditis, tubercular, three cases of - - - - 63-67
 Pericardium, adherent - - - 78
 ,, rupture of aneurism of aorta into 71
 Peritoneal cavity, rounded body in, removed in operation for hernia 89
 Peritoneum, cancer of, on surface of the liver - - - - 94
 Peritonitis, tubercular - - - 76
 Petrous bone, absorption of, from molluscous tumour - - - 1
 ,, necrosis of, and abscess in cerebellum - - - - 13
 PHARYNX, œsophagus, etc., diseases of 84-129
 Phthisis, tubercular pericarditis, etc., 64
 ,, in tubercular disease of cerebellum 17
 ,, millstone-makers', siliceous matter found in the lungs - - - 36
 Pleuritis, pneumo-thorax from opening of a vomica during - - - 40
 Pneumo-thorax from opening of a vomica during pleuritis - 40
 Poisoning by nitric acid - - - 114
 Polypus, fibro-muscular, from uterus, containing cyst and fatty tumour 148
 Pons Varolii, extravasation of blood into - - - - 6
 ,, hæmorrhage into - - - 16
 ,, softening of and extravasation of blood in - - - - 2
 ,, atrophic softening of - - - 4
 Pyelitis, chronic calculous, with dilatation of calyces of the kidneys 135
 QUAIN (Dr. R.), rupture of the left ventricle of the heart - - - 72
 ,, see TAYLOR.
 Rectum, cancerous growths surrounding - - - - 90
 ,, opening into vagina, in case of imperforate anus - - - - 87
 ,, villous tumours of the - - - 120
 RESPIRATION, ORGANS OF, diseases, etc., of - - - - 36-58
 Rima glottidis, fibrinous cast of - 56
 ROBERTSON (Dr.), *per Mr. Henry Thompson*, cancerous tumour involving the larynx, and dislocating the epiglottis and hyoid bone—death from spasm - - - 56
 ,, — report on ditto, by Dr. Gibb, and Dr. Dickinson - - - 57
 ROBINSON (Dr.), case of pneumothorax, resulting from the opening of a vomica during pleuritis - 40
 Rapture, spontaneous, of ovarian cyst 155
 SCHULHOF (Dr. Maurice), cancerous growth surrounding the rectum 90
 ,, — report on ditto, by Dr. Murchison and Mr. T. J. Ashton - 91
 Scirrhus of the cardia and œsophagus 95
 Scrofulous deposit in right hemisphere of cerebellum - - - - 8
 SEDGWICK (Mr.), imperforate anus, the rectum opening into the vagina 87
 ,, true keloid - - - - 234
 SENSE, ORGANS OF SPECIAL, diseases of - - - - 201-202
 Sero-cystic disease of the breast - 222
 Shoulder-joint, pathological changes in, by traumatic dislocation - 179

- Siliceous matter in lungs, in millstone-makers' phthisis - - - 36
- SMITH (Mr. T.), multiple neuromata 1
- „ fibro-muscular polypus from uterus, containing cyst and fatty tumour 148
- SPECIMENS (MISCELLANEOUS), including malformations of external parts, diseases of the skin, diphtheria, &c. - - - 234-242
- SPECIMENS FROM THE LOWER ANIMALS - - - 242-245
- Spleen, chronic enlargement of, with anæmia - - - 230
- „ hypertrophied - - - 224
- „ syphilitic disease of - - - 216
- „ syphilitic deposit in - - - 217
- Stomach, cancer of - - - 88
- „ of a girl, perforated by an ulcer 84
- Strangulation, internal, of the ileum 103
- „ — ditto, from its passage through the mesentery of the appendix vermiformis - - - 110
- „ — of small intestine, by ring formed by union of appendices epiploicæ 111
- Stricture of the descending colon - 94
- „ congenital, of the duodenum - 101
- „ of the œsophagus from malignant disease - - - 104
- „ of urethra, old-standing, treated by internal incision - - - 141
- Sugar, crystals of diabetic - 131
- SWELE (Mr.), portion of a tumour attached to the right ovary and broad ligament - - - 153
- Syphilis, hereditary, cast of the mouth of a child, the subject of - 239
- Syphilitic disease of the skull—epilepsy—trephining - - - 11
- „ — of spleen, liver and testes - 216
- „ deposit in the spleen and testes 217
- „ ulceration, absence of penis, from simulating hermaphroditism - 139
- TAYLOR (Mr. H. S.), *per Dr. Quain*, case of internal strangulation of the ileum - - - 103
- Teeth, deformity of jaw and, from sucking the thumb - - - 242
- Testis, undeveloped, from the body of an idiot - - - 143
- „ structure and secretions of one detained in inguinal canal - 143
- „ medullary cancer of - - - 147
- „ syphilitic disease of - - - 216
- „ syphilitic deposit in - - - 217
- „ removal of tumour of (sequel to case, Vol. XI., p. 161), in a young child - - - 145
- „ ditto (sequel to case, Vol. XI., p. 165) - - - 146
- THOMPSON (Mr. Henry), calculus impacted in a sac at the base of the bladder - - - 138
- „ numerous prostatic calculi - 139
- „ urethra—old-standing stricture—treated by internal incision - 141
- „ melanoid cancer, developed in a common dark mole - - - 206
- „ *report* on Mr. Fiddes' case of excision of the tongue - - - 223
- „ see CADGE, FIDDES, JACKSON, JEAFFRESON, NESBITT, ROBERTSON.
- Thumb-sucking, deformity of jaw and teeth from - - - 242
- TURNAM (Dr.), *per Dr. Peacock*, case of calcified tumour removed from abdomen - - - 157
- „ — *report* on ditto, by Dr. E. Montgomery - - - 158
- Thymus gland, enlarged, in case of laryngismus stridulus - 227
- TILT (Dr.) Exfoliation of the entire mucous membrane of the womb during menstruation - 149
- Tongue, epithelial cancer of - 46
- „ excision of, for epithelial disease 223
- Torcular herophili, laceration of the 167
- TOYNBEE (Mr. Joseph) molluscous sebiparous tumour, in external auditory meatus, causing absorption of petrous bone and abscess in cerebellum - - - 1
- „ necrosis of petrous bone, destruction of its middle third and abscess in cerebellum - - - 13
- Trachea, compression of, causing death in case of bronchocele - 229
- Trephining in syphilitic disease of the skull - - - 11
- Trochanter, small, bony union of, with spinous process of the ilium 169
- Tubercular disease of cerebellum - 17
- „ pericarditis, three cases of - 63
- „ ulceration of ileum, with perforation 64
- Tuberculosis, general - - - 66
- TUMOURS, CYSTS, etc. - 202-224
- Tumour of the neck, congenital - 206
- „ of the breast - - - 208
- „ and portion of lower jaw, removed by excision - - - 217
- „ cancerous, of larynx, etc. - 56
- „ probably cancerous, following recurrent fibroid - - - 219
- „ fatty, in fibro-muscular uterine polypus - - - 148
- „ molluscous sebiparous, in external auditory meatus - - - 1

- Tumour, ovarian—discharge into abdominal cavity - - - 150
 „ — removed by ovariectomy - 156
 „ — polycystic of right, and fibrous tumours of left side, removed at one operation - - - 154
 „ attached to right ovary and broad ligament - - - 153
- Tumours, sub-peritoneal, associated with cutaneous tumours - 210
 „ villous, of the rectum - - 120
- Tympani, membrana, ulceration of fibrous lamina of - - - 201
- Typhoid fever, intestine with cicatrices and unhealed ulcers, etc., from 96
- Ulcer, perforating, of the stomach in a girl - - - - - 84
 „ malignant, occurring in a cicatrix 220
- Ulceration of bowels - - - 76
 „ of fibrous lamina of membrana tympani - - - - - 201
- Urethra, old-standing stricture of, treated by internal incision - 141
- Uterus, exfoliation of mucous membrane of, during menstruation 149
- Valves, aortic, retroversion of one of 59
 „ — obstructive disease of - 75
 „ mitral, destruction of chordæ tendineæ of - - - - 59
 „ — obstructive disease of - 75
- Ventricle, left, aneurism of the apex of 69
 „ — small aneurism of - - 75
 „ — rupture of - - - - 72
- Ventricles, communication between 76
- Vertebræ, exostosis of - - - 101
- Villous tumours of the rectum - 120
- Viscera, enlargement of - - 213
- Vomica, pneumo-thorax from opening of a, during pleuritis - 40
- WEBER (Dr. Hermann) case of chronic hydrocephalus after birth - 23
 „ intestine presenting cicatrices and unhealed ulcers, with sloughing of the mesenteric glands from typhoid fever, etc. - - - - 96
- WELLS (Mr. Spencer), ovarian cyst. fatal by spontaneous rupture - 155
 „ ovarian cysts and tumours removed by ovariectomy (seven cases) - 156
 „ tumour and portion of lower jaw, removed by excision - - 217
- WILKS (Dr. Samuel). inflammation of the spinal cord (myelitis) - 9
 „ dilatation of the bronchial tubes 58
 „ dissecting aneurism of aorta - 67
 „ enlargement of pulmonary artery in contraction of mitral orifice - 70
 „ aneurism of the aorta, rupture into pericardium—closure by inflammation - - - - 71
 „ enlargement of pulmonary artery, with bronchial disease - 78
 „ congenital stricture of the duodenum 101
 „ cancer of the œsophagus; exostosis of vertebræ - - - - 101
 „ enlargement of the viscera and glands - - - - 213
 „ syphilitic disease of the spleen, liver and testes - - - - 216
 „ syphilitic deposit in the spleen and testes - - - - 217
 „ report on Mr. Nesbitt's case of a rounded body in peritoneal cavity 90
 „ report on Dr. Dickinson's case of colloid cancer - - - - 93
 „ report on Mr. W. Adams' case of epithelial cancer of lower jaw 205
 „ report on Mr. Wood's case of tumour of the breast - - - - 210
 „ report on Mr. Durham's case of cancerous tumour following recurrent fibroid - - - - 219
- WOOD (Mr. John), tumour of the breast 208
 „ — report on ditto by Dr. Wilks 210
 „ report on Mr. Nesbitt's case of a rounded body in peritoneal cavity 90
 „ report on Mr. Canton's case of the pelvis of an aged female dwarf 175

THE END.





RB

1

P4

v. 12

Biological
& Medical
Serials

Pathological Society of
London

Transactions

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY

