

## Original Articles.

## AMPUTATIONS AT THE RHODE ISLAND HOSPITAL FROM 1868 TO 1883.

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THE following tables present the statistics of all the major amputations performed at the Rhode Island Hospital for the fifteen years that have elapsed since the opening of the hospital, October 1, 1868. The record closes with September 30, 1883, and includes the results of three cases then remaining in the hospital. The whole number of cases is, of course, small, and it is not to be supposed that their presentation will add to or alter the well-known and established principles applicable to these operations. Recognizing the uncertainty of figures and the prevalent belief that statistics are unreliable, I still think that any such collection of data possesses a certain degree of interest, and can afford instruction to every surgeon whose labors are in the same field. Both successes and failures have alike their lesson. At all events, they show something of the work accomplished by the hospital. In the earlier years of its existence this hospital, the first of its kind in the city of Providence, had to win its place in popular favor, and to overcome more or less opposition and distrust. As a consequence it will be seen that in the earlier years the number of cases brought to the hospital demanding operation were comparatively few. Its position now has become firmly established, and with the growth of the city and the increase of varied manufacturing interests it is more than probable that the next decade will see it taxed to its utmost capacity.

The operations have been tabulated under the heads of Traumatic Primary, including a period of less than forty-eight hours, Traumatic Secondary, at any time after that period, and Pathological. For the sake of convenience I have used the numbers 1, 2, 3, to designate respectively the upper, middle and lower thirds of a limb, and the junction of two thirds has been expressed thus: 1—2. Any one who has had occasion to look up hospital records will probably appreciate the dissatisfaction that is felt by the compiler when he finds that his blanks cannot all be filled. Sometimes the side of the body is not specified; the cause of the injury is not always given; frequently the method of operating is entirely ignored, and in some cases of death the cause of death is passed over. The latter blank I have filled according to my best judgment, after a careful study of the case. Double amputations and reamputations have been included under their appropriate heads, with cross references. I have said

that the list is of the major amputations, but nine operations upon the foot are included.

The Lister method and dressings were first used in the hospital in February, 1878. Since that date very many of the operations have been done according to the various modifications of that method that have been in vogue. The two chief points of Listerism, drainage and cleanliness, have been faithfully sought by all the surgeons of the staff. Some have had more decided views than others as to antiseptic treatment. No attempt has been made to institute a comparison between the methods of treatment in this respect, as the number of cases was so small, and the results of such large experience are already matters of record. The various antiseptics, carbolic acid, thymol, boracic acid, phenol, iodoform, chlorinated soda, and corrosive sublimate have all been used. The spray has been rarely used, if at all, during the last few years.

The results of treatment compare, perhaps, favorably with those of other hospitals, although it seems as if they ought to have been better when we consider the salubrious situation of the hospital, the possession of large and well-ventilated wards, and the freedom from overcrowding which has generally existed. But it must be remembered that most of the accidents are caused by railroads and machinery, and are often of so severe a nature that the best efforts of the surgeon will prove fruitless.

With these preliminary statements I pass to the tables. There have been 123 operations performed on 111 patients. There were nine cases of double amputation, and there were three cases of reamputation, all of which will be found in detail in the summary. One case of traumatic secondary of the thigh is not included: the operation was repeated for secondary hemorrhage not controlled by ligature. And in the last recorded case of double amputation, the only one of both legs, both stumps were reamputated, but the second operation was subsequent to the period at which this record terminates.

Of 123 operations 57 were traumatic primary, 26 traumatic secondary, and 40 pathological. Of the 111 patients operated upon 24 died, or 21.62 per cent. Of the primary there were 51 cases with 11 deaths, or 21.57 per cent.; of the secondary 22 cases with eight deaths, or 36.36 per cent.; and of the pathological 36 cases with five deaths, or 13.88 per cent. There were two cases of double amputations, in which one operation was primary and the other secondary, and both cases recovered. Classing together the operations for injury we have 73 cases with 19 deaths, or 26.03 per cent. The causes of death will be found in the Summary, tabulated both as to the limb amputated and the nature of the operation.

## AMPUTATION AT THE SHOULDER-JOINT. TRAUMATIC PRIMARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.                             | Cause.                       | Method.      | Result.    | Date of Discharge. |
|-----|------|------|--------------------|---|------------------------------|--------------|------------|--------------------|
| 1   | M.   | 13   | July 28, 1869.     | —   | —                            | —            | Recovered. | Oct. 8, 1869.      |
| 2   | M.   | 10   | Feb. 28, 1882.     | R. Compound fract. arm and exten. laceration. | Machinery. Cotton mill gear. | Double flap. | Recovered. | April 17, 1882.    |

Recovered, 2.

## AMPUTATION OF THE ARM. TRAUMATIC PRIMARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.              | Cause.     | Operation. |           | Result.    | Date of Discharge or Death. | Remarks. |
|-----|------|------|--------------------|--------------------------------|------------|------------|-----------|------------|-----------------------------|----------|
|     |      |      |                    |                                |            | Point.     | Method.   |            |                             |          |
| 1   | M.   | 15   | Jan. 26, 1869.     | R.                             | Machinery. | 2—3        | Circular. | Recovered. | March 22, 1869.             | —        |
| 2   | F.   | 18   | Aug. 18, 1869.     | R. Torn off 4 in. above elbow. | R. R.      | Middle.    | Circular. | Recovered. | Oct. 14, 1869.              | —        |

## AMPUTATION OF THE ARM. TRAUMATIC PRIMARY. (Concluded.)

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.               | Cause.     | Operation.           |                  | Result.    | Date of Discharge or Death. | Remarks.  |
|-----|------|------|--------------------|---------------------------------|------------|----------------------|------------------|------------|-----------------------------|---|
|     |      |      |                    |                                 |            | Point.               | Method.          |            |                             |   |
| 3   | M.   | 21   | Jan. 12, 1870.     | L.                              | Machinery. | 2-3                  | Flap.            | Recovered. | March 2, 1870.              | -   |
| 4   | M.   | 30   | July 19, 1870.     | R.                              | R. R.      | 2                    | Circular.        | Recovered. | Aug. 6, 1870.               | -   |
| 5   | M.   | 15   | Sept. 27, 1870.    | -                               | Machinery. | 1                    | Integ. flaps.    | Recovered. | Dec. 10, 1870.              | Abscess in axilla.  |
| 6   | M.   | 74   | Oct. 4, 1870.      | R.                              | R. R.      | 1                    | A. P. flaps.     | Died.      | 24 hours.                   | Shock.  |
| 7   | M.   | 14   | July 31, 1872.     | Torn off 1-2.                   | Machinery. | -                    | -                | Recovered. | Sept. 8, 1872.              | -   |
| 8   | M.   | 75   | Sept. 7, 1872.     | -                               | R. R.      | -                    | -                | Died.      | 1½ hours.                   | Leg amputated, Traumatic Primary, No. 3. Shock.   |
| 9   | M.   | 26   | Feb. 25, 1873.     | -                               | R. R.      | 1                    | A. P. integ. fl. | Recovered. | May 15, 1873.               | Erysip. Stump with slough.  |
| 10  | M.   | 17   | June 18, 1874.     | L.                              | R. R.      | 3                    | Flap.            | Recovered. | Dec. 29, 1874.              | March 13, 1 in. bone removed.   |
| 11  | M.   | 23   | Sept. 17, 1874.    | L.                              | R. R.      | 2                    | -                | Recovered. | Nov. 23, 1874.              | Leg amp., Trau. Prim., No. 7. Repeated attacks erysipelas. Operat. performed outside by one of the staff, and sent at once to hospital. |
| 12  | M.   | 50   | July 27, 1875.     | R. Comp. com. fracture.         | Machinery. | 3                    | Circular.        | Recovered. | Sept. 18, 1875.             | -   |
| 13  | M.   | 24   | Jan. 1, 1877.      | L.                              | R. R.      | 1                    | -                | Recovered. | March 10, 1877.             | -   |
| 14  | M.   | 8    | Dec. 4, 1879.      | L.                              | R. R.      | 3                    | Flap.            | Died.      | Dec. 17, 1879.              | Lacerated wounds both feet. Metatars. Amp. of one.  |
| 15  | M.   | 12   | Sept. 27, 1883.    | R. Comp. fract. and laceration. | Machinery. | Below surgical neck. | A. P. flaps.     | Recovered. | Dec. 4, 1883.               | Foot, Trau. Prim., No. 3. Sec. hæm. feet. Slough foot and arm. Pyæmia. Brachial ligated prior to operation.                             |

Recovered, 12  
Died, 3  
Total, 15

Cause of death: Shock, 2  
Pyæmia, 1  
Total, 3

## AMPUTATION OF THE ARM. TRAUMATIC SECONDARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.       | Cause.  | Operation. |        |              | Result.    | Date of Discharge or Death. | Remarks.  |
|-----|------|------|--------------------|-------------------------|---------|------------|--------|--------------|------------|-----------------------------|---|
|     |      |      |                    |                         |         | Date.      | Point. | Method.      |            |                             |   |
| 1   | M.   | 50   | Aug. 2, 1882.      | L. Comp. fract. f. arm. | Mach'y. | Aug. 15.   | 3      | A. P. flaps. | Died.      | Aug. 17, 1882.              | Pyæmia.   |
| 2   | M.   | 35   | Aug. 22, 1882.     | R.                      | R. R.   | Aug. 24.   | -      | -            | Recovered. | Nov. 23, 1882.              | Amp. left leg, traum. prim. No. 23. Oct. 21st, fell and dislocated stump at shoulder. Attempt at reduct. unsuc. |
| 3   | M.   | 29   | Dec. 15, 1882.     | R. F. arm crushed.      | Mach'y. | Dec. 28.   | 1-2    | A. P. flaps. | Recovered. | April 5, 1883.              | -   |

Recovered, 2  
Died, 1  
Total, 3

Cause of death: Pyæmia, 1.

## AMPUTATION OF THE ARM. PATHOLOGICAL.

| No. | Sex. | Age. | Date of Admission. | Nature of Disease.         | Operation. |        |         | Result.    | Date of Discharge. | Remarks.                       |
|-----|------|------|--------------------|----------------------------|------------|--------|---------|------------|--------------------|--------------------------------|
|     |      |      |                    |                            | Date.      | Point. | Method. |            |                    |                                |
| 1   | M.   | 30   | Feb. 23, 1882.     | R. Necrosis. Prev. resect. | April 20.  | 1      | -       | Recovered. | June 8, 1882.      | Resection performed March 7th. |

Recovered, 1.

## AMPUTATION OF THE FORE-ARM. TRAUMATIC PRIMARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury. | Cause.                | Operation.        |              | Result.    | Date of Discharge or Death. | Remarks.                                       |
|-----|------|------|--------------------|-------------------|-----------------------|-------------------|--------------|------------|-----------------------------|--|
|     |      |      |                    |                   |                       | Point.            | Method.      |            |                             |  |
| 1   | M.   | 30   | July 27, 1869.     | -                 | Machinery.            | 3                 | Circular.    | Recovered. | Aug. 25, 1869.              | -  |
| 2   | M.   | 17   | May 31, 1871.      | -                 | Machinery.            | 1-2               | Circular.    | Recovered. | July 20, 1871.              | -  |
| 3   | M.   | 15   | Oct. 31, 1872.     | -                 | Machinery.            | 2                 | -            | Recovered. | Dec. 13, 1872.              | -  |
| 4   | M.   | 12   | May 12, 1874.      | R.                | Machinery.            | 2                 | Flap.        | Recovered. | June 22, 1874.              | -  |
| 5   | M.   | 29   | Jan. 22, 1882.     | L.                | Machinery, steamboat. | 3                 | Integ. flap. | Recovered. | Feb. 24, 1882.              | -  |
| 6   | M.   | 28   | Nov. 7, 1882.      | L.                | R. R.                 | 2                 | -            | Recovered. | Dec. 30, 1882.              | -  |
| 7   | M.   | 14   | July 12, 1883.     | Hand lacerated.   | Caught in cog.        | Just above wrist. | -            | Died.      | July 13, 1883.              | Profuse hæmorrhage at time of accident. Shock. |

Recovered, 6  
Died, 1  
Total, 7

Cause of death: Shock and hæmorrhage, 1.

## AMPUTATION OF THE FORE-ARM. TRAUMATIC SECONDARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.      | Cause.              | Operation.    |        |                  | Result. | Date of Discharge. | Remarks.                                |
|-----|------|------|--------------------|------------------------|---------------------|---------------|--------|------------------|---------|--------------------|---|
|     |      |      |                    |                        |                     | Date.         | Point. | Method.          |         |                    |   |
| 1   | M.   | 31   | Dec. 21, 1876.     | Lacer. wound.          | Machinery.          | Jan. 10, '77. | 3      | Circular.        | Recov.  | March 3, 1877.     | Sec. hæm. Rad. ligated Jan. 29th.       |
| 2   | M.   | 30   | Jan. 28, 1882.     | Comp. dislocat. wrist. | Blow, heav. timber. | March 14.     | 3      | Integ. fl.       | Recov.  | April 22, 1882.    | Dislocation reduced prior to admission. |
| 3   | F.   | 43   | March 19, 1883.    | R. Necros. carpus.     | Blow.               | March 23.     | 3      | A. P. integ. fl. | Recov.  | May 29, 1883.      | Injury five weeks prior to admission.   |
| 4   | M.   | 21   | April 4, 1883.     | L. comp. fracture.     | Machinery.          | April 23.     | 1      | A. P. integ. fl. | Recov.  | June 12, 1883.     | -                                       |

Recovered, 4 cases.

## AMPUTATION OF THE FORE-ARM. PATHOLOGICAL.

| No. | Sex. | Age. | Date of Admission. | Nature of Disease.                | Operation.     |        |           | Result.    | Date of Discharge. | Remarks.                  |
|-----|------|------|--------------------|-----------------------------------|----------------|--------|-----------|------------|--------------------|---------------------------|
|     |      |      |                    |                                   | Date.          | Point. | Method.   |            |                    |                           |
| 1   | M.   | 41   | Nov. 15, 1869.     | L. Necrosis. Comp. fract. Resect. | March 5, 1870. | 2      | Circular. | Recovered. | April 13, 1870.    | Resection, Nov. 20, 1869. |

Recovered, 1.

## AMPUTATION OF THE THIGH. TRAUMATIC PRIMARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.                        | Cause.    | Operation. |                      | Result.    | Date of Discharge or Death. | Remarks.   |
|-----|------|------|--------------------|--|-----------|------------|----------------------|------------|-----------------------------|--|
|     |      |      |                    |  |           | Point.     | Method.              |            |                             |  |
| 1   | M.   | 19   | Feb. 21, 1879.     | R. leg torn off bel. knee. Joint opened. | R. R.     | 2-3        | Long A. integ. flap. | Died.      | Three hours.                | Accident two hours before admission. Shock.                                |
| 2   | M.   | 21   | June 23, 1880.     | L. Compound com. fract. leg.             | R. R.     | 2          | Oval integ. flaps.   | Recovered. | July 24, 1880.              | Accident 5 hrs. before admission. Op. 14 hrs. after admis.                 |
| 3   | M.   | 27   | Sept. 9, 1881.     | R. Compound com. fract. leg.             | R. R.     | 2          | Flap.                | Recovered. | Nov. 23, 1881.              | Comm. fract. l. ankle. Dead bone removed Nov. 9th. Discharged nearly well. |
| 4   | M.   | 14   | Oct. 24, 1882.     | R. Compound fract. knee.                 | Elevator. | 2          | Circular.            | Recovered. | March 24, 1883.             | Fracture left femur.   |

Recovered, 3  
Died, 1

Cause of death: Shock, 1.

Total, 4

## AMPUTATION OF THE THIGH. TRAUMATIC SECONDARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.                               | Cause.                      | Operation. |        |                          | Result. | Date of Discharge or Death. | Remarks.   |
|-----|------|------|--------------------|---|-----------------------------|------------|--------|--------------------------|---------|-----------------------------|--|
|     |      |      |                    |   |                             | Date.      | Point. | Method.                  |         |                             |  |
| 1   | M.   | 47   | Jan. 14, 1870.     | Lacerat. wound leg.                             | Blasting.                   | Feb. 19.   | 2      | Long A. integ. fl.       | Died.   | Feb. 19, 1870.              | Attempt to save limb. D. six hours after operation. Shock.   |
| 2   | M.   | 16   | Nov. 21, 1872.     | R. Necros. Un-united fract.                     | Machinery.                  | Dec. 18.   | 2      | Anterior flap.           | Recov.  | March 8, 1873.              | Accident three months before admission. Both thighs broken. Natural bone-setter. L. united with curvature and six inches shortening. |
| 3   | M.   | 29   | July 5, 1874.      | L. Inc. wound knee-joint.                       | Stepped upon scythe.        | July 27.   | 2-3    | Flap.                    | Died.   | Aug. 2, 1874.               | Accident three days before entrance. Pyæmia.   |
| 4   | M.   | 47   | March 2, 1878.     | L. Fract. thigh. Rupt. popliteal art. Gangrene. | Run over.                   | March 27.  | 2      | Lat. integ. flap.        | Died.   | July 12, 1878.              | Fracture left humerus. Two days after admission gangrene developed. June 17th, stump nearly healed. Erysipelas.                      |
| 5   | M.   | 35   | Dec. 14, 1882.     | Compound fracture leg.                          | Heavy timber fell upon him. | Dec. 23.   | 3      | Ant. post. flap.         | Died.   | Jan. 23, 1883.              | Repeated sec. hæm. Femoral tied, Jan. 11th, lower third, followed by immediate reamputation. Pyæmia.                                 |
| 6   | M.   | 8    | July 24, 1883.     | Fracture thigh. Separation of epiph. Gangrene.  | Jump from a wagon.          | Aug. 4.    | 3      | Ant. post. fl. Transfix. | Recov.  | Jan. 2, 1884.               | Gangrene developed two days after admission. Dead bone removed November 24th.  |

Recovered, 2  
Died, 4Cause of death: Pyæmia, 2  
Shock, 1  
Erysipelas, 1

Total, 6

Total, 4

## AMPUTATION OF THE THIGH. PATHOLOGICAL.

| No. | Sex. | Age. | Date of Admission. | Nature of Disease.               | Operation.     |        |                                      | Result. | Date of Discharge or Death. | Remarks.   |
|-----|------|------|--------------------|----------------------------------|----------------|--------|--------------------------------------|---------|-----------------------------|--|
|     |      |      |                    |                                  | Date.          | Point. | Method.                              |         |                             |  |
| 1   | M.   | 24   | Nov. 27, 1869.     | L. Knee. Painful stump.          | Nov. 27.       | 2—3    | Long A. integ. fl.                   | Recov.  | May 3, 1870.                | See Knee, Patholog., No. 1. 1½ inch nerve removed.                           |
| 2   | M.   | 33   | Aug. 30, 1870.     | Strum. disease knee-joint.       | Oct. 25.       | 1      | Long A. flap.                        | Recov.  | Dec. 26, 1870.              | Bone eburnized. Disease existed sixteen years.                               |
| 3   | M.   | 29   | Sept. 22, 1870.    | Strum. disease knee-joint.       | Sept. 25.      | 2      | Integ. flaps.                        | Died.   | Oct. 13, 1870.              | Secondary hæmorrhage. Pyæmia.  |
| 4   | M.   | 41   | Jan. 26, 1872.     | Strum. disease knee-joint.       | March 16.      | 2      | —                                    | Died.   | March 17, 1872.             | Shock, twenty hours. Joint aspirated February 2d.                            |
| 5   | M.   | 17   | Oct. 16, 1872.     | Necrosis.                        | Oct. 16.       | 2      | Ant. flap.                           | Recov.  | Nov. 16, 1872.              | —  |
| 6   | M.   | 16   | April 27, 1876.    | Medull. tumor leg.               | April 27.      | 3      | Flap.                                | Recov.  | June 29, 1876.              | —  |
| 7   | M.   | 48   | March 22, 1880.    | Infl. knee. Necrosis. femur.     | March 25.      | 3      | Short ant., long post. integ. flaps. | Recov.  | June 25, 1880.              | Fell from yard-arm three years previous. Stump painful, not entirely healed. |
| 8   | M.   | 29   | Jan. 9, 1882.      | Necrosis.                        | Jan. 28.       | 2—3    | Lat. integ. flap.                    | Recov.  | March 15, 1882.             | Fistulous track extended eight inches above point of section.                |
| 9   | F.   | 28   | Oct. 13, 1882.     | Necrosis.                        | Dec. 28.       | 3      | Ant. post. flap.                     | Recov.  | April 12, 1883.             | For two weeks after operation delirium, vomiting, diarrhoea.                 |
| 10  | M.   | 2    | Nov. 8, 1882.      | Infl. knee-joint. Necrosis.      | Feb. 10, 1883. | 3      | Long ant., short post. integ. flap.  | Recov.  | March 19, 1883.             | Injury caused by blow.   |
| 11  | M.   | 42   | Dec. 21, 1882.     | Dis. knee-joint from injury.     | Jan. 10, 1883. | 3      | A. P. integ. flaps.                  | Recov.  | March 14, 1883.             | Injury nine years previous. Patholog. dislocat. posterior.                   |
| 12  | M.   | 21   | March 9, 1883.     | R. Knee. Sup. arthritis. Injury. | March 20.      | 3      | A. integ. post. musc. flap.          | Recov.  | May 21, 1883.               | Injury four years prior to admission.  |

Recovered, 10.  
Died, 2  
Total, 12

Cause of death: Pyæmia, 1  
Shock, 1

Total, 2

## AMPUTATION AT THE KNEE-JOINT. PATHOLOGICAL.

| No. | Sex. | Age. | Date of Admission. | Nature of Disease. | Operation.     |  | Result.    | Date of Discharge or Death. | Remarks.  |
|-----|------|------|--------------------|--------------------|----------------|--|------------|-----------------------------|---|
|     |      |      |                    |                    | Date.          | Method.                                    |            |                             |   |
| 1   | M.   | 24   | Feb. 23, 1869.     | L. Painful stump.  | Feb. 23.       | Long ant., short pos. flaps. Patella left. | Recovered. | June 10, 1869.              | Leg amputated two years before admission. When discharged stump entirely well. Reamputated. See Thigh, Path. No. 1. |
| 2   | M.   | 40   | Aug. 3, 1876.      | Necrosis.          | Aug. 12.       | Post. flap.                                | Died.      | Aug. 12, 1876.              | Shock. Three hours.   |
| 3   | F.   | 28   | Aug. 19, 1881.     | Painful stump.     | Jan. 23, 1882. | Smith's.                                   | Recovered. | March 18, 1882.             | See Leg, Traum. Prim., No. 20.  |

Recovered, 2  
Died, 1  
Total, 3

Reamputation, 1

Cause of death: Shock, 1

## AMPUTATION OF THE LEG. TRAUMATIC PRIMARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.       | Cause.               | Operation. |                                  | Result. | Date of Discharge or Death. | Remarks.  |
|-----|------|------|--------------------|-------------------------|----------------------|------------|----------------------------------|---------|-----------------------------|---|
|     |      |      |                    |                         |                      | Point.     | Method.                          |         |                             |   |
| 1   | M.   | 30   | June 15, 1871.     | L.                      | R. R. Machinery.     | 2—3        | Flap.                            | Recov.  | Aug. 24, 1871.              | Fracture right leg.   |
| 2   | M.   | 38   | July 1, 1871.      | —                       | R. R.                | 2—3        | Flap.                            | Died.   | July 16, 1871.              | Pyæmia.   |
| 3   | M.   | 75   | Sept. 7, 1872.     | —                       | R. R.                | —          | —                                | Died.   | Sept. 7, 1872.              | Shock, 1½ hours. Arm amputated. See Traum. Prim., No. 8.  |
| 4   | M.   | 27   | April 20, 1873.    | —                       | R. R.                | 1          | Lat. flaps.                      | Died.   | April 29, 1873.             | Exhaustion.   |
| 5   | M.   | 51   | June 28, 1873.     | —                       | R. R.                | —          | Ant. post. integ. flaps.         | Died.   | July 4, 1873.               | Pneumonia. Comp. fract. L. olecranon. Amputat R. metatars. See Foot, Traum. Prim., No. 1.   |
| 6   | M.   | 26   | Sept. 4, 1873.     | L.                      | R. R.                | 1          | Post. flap.                      | Died.   | Sept. 4, 1873.              | Shock, ten hours. R. foot crushed. Lacerated wound back, exposing spin. processes lumb. verteb. & innom. bone. Arm amputated. See Traum. Prim., No. 10. |
| 7   | M.   | 17   | June 18, 1874.     | R.                      | R. R.                | 3          | Circular.                        | Recov.  | Dec. 29, 1874.              | Comp. commin. fract. R. foot. Fract. R. leg. Septicæmia.  |
| 8   | M.   | 52   | Aug. 4, 1875.      | L.                      | R. R.                | —          | Integ. flaps.                    | Died.   | Aug. 31, 1875.              | —   |
| 9   | M.   | 35   | March 15, 1876.    | R.                      | R. R. Machinery.     | 3          | Integ. flaps.                    | Recov.  | May 21, 1876.               | —   |
| 10  | M.   | 30   | Feb. 4, 1878.      | R. comp. com. fracture. | R. R.                | 1          | Lat. integ. flaps.               | Recov.  | May 11, 1878.               | First use of Lister's method.   |
| 11  | M.   | 33   | June 2, 1879.      | R. Foot crush'd         | R. R.                | 1—2        | Integ. flaps.                    | Recov.  | Nov. 1, 1879.               | Dead bone removed Sept. 5th.  |
| 12  | M.   | 37   | Aug. 1, 1879.      | R. Leg torn off         | R. R.                | 1          | Ant. post. flap.                 | Recov.  | Sept. 11, 1879.             | —   |
| 13  | M.   | 20   | Dec. 6, 1879.      | L. Leg crush'd.         | R. R.                | 1          | Long ant. flap.                  | Recov.  | March 29, 1880.             | Feb. 21, 1880, orchitis R. testicle. Suppuration.   |
| 14  | M.   | 31   | April 30, 1880.    | R. Comp. com. fracture. | Falling of a tree.   | 1          | Double flap.                     | Recov.  | July 1, 1880.               | —   |
| 15  | M.   | 43   | July 3, 1880.      | R. Comp. com. fracture. | Thrown from a wagon. | 1—2        | Ant. integ. pos. ov. musc. flap. | Died.   | July 15, 1880.              | Primary hæmorrhage. Exhaustion.   |
| 16  | M.   | 22   | May 5, 1881.       | R. Comp. com. fracture. | R. R.                | 1—2        | Flap.                            | Recov.  | Aug. 6, 1881.               | May 24, 1½ inches bone removed. Sec. hæmorrhage   |

## AMPUTATION OF THE LEG. TRAUMATIC PRIMARY. (Concluded.)

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.         | Cause.              | Operation. |                         | Result. | Date of Discharge or Death. | Remarks.   |
|-----|------|------|--------------------|---------------------------|---------------------|------------|-------------------------|---------|-----------------------------|--|
|     |      |      |                    |                           |                     | Point.     | Method.                 |         |                             |  |
| 17  | M.   | 42   | June 2, 1881.      | R. Comp. com. fracture.   | Crush'd by iron.    | 2-3        | Ant. pos. integ. flaps. | Recov.  | Aug. 17, 1881.              | June 24, half inch fibula removed.   |
| 18  | M.   | 34   | July 12, 1881.     | L. Lacer. foot and ankle. | R. R.               | 2-3        | Ant. pos. integ. flaps. | Recov.  | Sept. 10, 1881.             | Intense neural pains in stump, with delirium. Aug. 10, half inch bone removed. |
| 19  | F.   | 22   | July 20, 1881.     | R. R. Com. disloc. ankle. | R. R.               | 3          | Flap.                   | Recov.  | Oct. 27, 1881.              |  |
| 20  | F.   | 28   | Aug. 19, 1881.     | R. R. Com. disloc. ankle. | Jump from 2d story. | 2-3        | Flap.                   | Recov.  | March 18, 1882.             | Reamputation. See Amp. Knee-joint, Path., No. 3.                               |
| 21  | M.   | 12   | Oct. 12, 1881.     | R. Foot crush'd           | R. R.               | -          | Flap.                   | Recov.  | Nov. 23, 1881.              | -  |
| 22  | M.   | 28   | June 15, 1882.     | L. Leg torn off.          | R. R.               | 2          | Smith's.                | Recov.  | Sept. 8, 1882.              | Comp. fract. right tarsus. See amp. See Leg traum. sec. No. 5.                 |
| 23  | M.   | 35   | Aug. 22, 1882.     | L.                        | R. R.               | -          | -                       | Recov.  | Nov. 23, 1882.              | Arm amp. Aug. 24. See Traum. Sec., No. 2.                                      |
| 24  | M.   | 37   | Oct. 19, 1882.     | R. Comp. com. fracture.   | Jump from window.   | -          | -                       | Recov.  | Jan. 18, 1883.              | -  |
| 25  | M.   | 48   | Nov. 21, 1882.     | L.                        | Jump from building. | 2          | -                       | Recov.  | Jan. 26, 1883.              | -  |

Recovered, 18  
Died, 7  
Total, 25

Reamputation, 1

Cause of death: Shock, 2  
Exhaustion, 2  
Pyæmia, 1  
Septicæmia, 1  
Pneumonia, 1  
Total, 7

## AMPUTATION OF THE LEG. TRAUMATIC SECONDARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.             | Cause.                | Operation. |        |                              | Result. | Date of Discharge or Death. | Remarks.   |
|-----|------|------|--------------------|-------------------------------|-----------------------|------------|--------|------------------------------|---------|-----------------------------|--|
|     |      |      |                    |                               |                       | Date.      | Point. | Method.                      |         |                             |  |
| 1   | M.   | 21   | June 16, 1874.     | R. Cont. wound toe.           | -                     | Aug. 7.    | 3      | -                            | Recov.  | Dec. 18, 1874.              | Toe amputated, July 3. Cellulitis.   |
| 2   | M.   | 42   | April 11, 1878.    | R. Comp. frac. tib. & fib.    | -                     | July 3.    | 1-2    | L. A. sh. pos. flap.         | Died.   | July 25, 1878.              | Septicæmia.  |
| 3   | M.   | 40   | Jan. 2, 1880.      | L. Leg and foot crushed.      | Wardrobe fell on him. | Jan. 5.    | 1      | L. A. sh. pos. integ. flaps. | Died.   | Jan. 15, 1880.              | Gangrene developed on 3d. Refused operation. Died from exhaustion.                       |
| 4   | M.   | 40   | Sept. 6, 1881.     | R. Leg. L. metatars. crushed. | Heav. stone.          | Sept. 8.   | 2      | A. I. pos. mus. fl.          | Recov.  | Nov. 3, 1881.               | Amputat. L. metatars. See Foot, Traum. Second., No. 2.                                   |
| 5   | M.   | 28   | June 15, 1882.     | R. Comp. frac. tarsus.        | R. R.                 | July 14.   | 3      | Teale's.                     | Recov.  | Sept. 8, 1882.              | Knee became flexed. Tenotomy, Aug. 12. Left leg torn off. See Leg, Traum. Prim., No. 22. |
| 6   | M.   | 38   | Aug. 29, 1882.     | R. Comp. com. min. fract.     | Caught by rope.       | Sept. 6.   | 2      | -                            | Recov.  | Dec. 4, 1882.               | -  |
| 7   | M.   | 12   | July 7, 1883.      | Comp. com. min. fract. ankle. | Jump from 3d story.   | Sept. 5.   | 2-3    | Teale's.                     | Recov.  | Oct. 26, 1883.              | Eloped.  |
| 8   | M.   | -    | July 24, 1883.     | R. Vicious union comp. fract. | -                     | Aug. 15.   | 1-2    | A. post. integ. fl.          | Recov.  | Oct. 19, 1883.              | -  |
| 9   | M.   | 73   | Aug. 2, 1883.      | R. Comp. frac. tib.           | Kick of horse.        | Sept. 3.   | 1      | A. post. flap.               | Died.   | Sept. 11, 1883.             | Septicæmia.  |
| 10  | M.   | 17   | Sept. 23, 1883.    | Both legs. comp. frac.        | R. R.                 | Sept. 26.  | 3      | A. pos. fl.                  | Recov.  | Feb. 7, 1884.               | Stumps sloughed.   |

Recovered, 8  
Died, 3  
Total, 11

Cause of death: Septicæmia, 2  
Exhaustion, 1  
Total, 3

## AMPUTATION OF THE LEG. PATHOLOGICAL.

| No. | Sex. | Age. | Date of Admission. | Nature of Disease.      | Operation.     |        |                  | Result. | Date of Discharge or Death. | Remarks.   |
|-----|------|------|--------------------|-------------------------|----------------|--------|------------------|---------|-----------------------------|--|
|     |      |      |                    |                         | Date.          | Point. | Method.          |         |                             |  |
| 1   | M.   | 20   | Jan. 26, 1869.     | L. Ulcer.               | Jan. 30.       | 3      | Circular.        | Recov.  | -                           | Reamputation.  |
| 2   | M.   | 43   | May 5, 1869.       | L. Painful stump.       | May 19.        | 1-2    | Circular.        | Recov.  | Sept. 25, 1869.             | Stump not healed.  |
| 3   | M.   | 42   | July 21, 1869.     | L. Syphilit. ulcer.     | May 5.         | 2      | Circular.        | Recov.  | June 11, 1869.              | Amputated five years previous.   |
| 4   | M.   | 42   | Oct. 25, 1869.     | R. Necrosis.            | Dec. 29.       | 2-3    | Integ. flaps.    | Recov.  | Mar. 12, 1870.              | -  |
| 5   | M.   | 32   | Feb. 3, 1871.      | R. Epithelioma foot.    | Oct. 27.       | 2-3    | Flap.            | Recov.  | Feb. 12, 1870.              | -  |
| 6   | F.   | 71   | March 8, 1871.     | Necrosis.               | Feb. 3.        | 1-2    | Circular.        | Recov.  | Mar. 29, 1871.              | -  |
| 7   | M.   | 42   | Sept. 1, 1871.     | Ulcer.                  | June 8.        | 2-3    | Flap.            | Recov.  | Aug. 28, 1871.              | -  |
| 8   | M.   | 40   | May 9, 1872.       | Necrosis.               | Sept. 26.      | 1      | Flap.            | Died.   | Oct. 31, 1871.              | Pyæmia.  |
| 9   | M.   | 16   | Oct. 2, 1872.      | Necrosis.               | May 25.        | 3      | -                | Recov.  | June 17, 1872.              | -  |
| 10  | F.   | 11   | May 20, 1873.      | Necrosis.               | Feb. 12, 1873. | 3      | -                | Recov.  | June 23, 1873.              | May 30, 1/2 in. bone removed.  |
| 11  | M.   | 57   | May 28, 1873.      | L. Scrof. ulcer, foot.  | June 16.       | 3      | A. pos. int. fl. | Recov.  | Sept. 12, 1873.             | -  |
| 12  | F.   | 35   | Jan. 14, 1876.     | L. Painful stump.       | June 13.       | 2      | -                | Recov.  | Aug. 14, 1873.              | Original amputation 12 years previous. R. foot also amputated. See Foot, Path., No. 2. |
| 13  | M.   | 60   | July 16, 1876.     | R. Necrosis.            | Feb. 2.        | 2      | Circular.        | Recov.  | Mar. 23, 1876.              | -  |
| 14  | M.   | 24   | May 4, 1878.       | L. Necrosis.            | Sept. 13.      | 3      | Flaps.           | Recov.  | Oct. 23, 1876.              | -  |
| 15  | M.   | 38   | Nov. 4, 1878.      | L. Necrosis.            | May 11.        | 1      | A. post. flaps.  | Recov.  | June 28, 1878.              | Injured in the war. Resection of tibia in the hosp. Jan. '77.                          |
| 16  | M.   | 12   | Nov. 4, 1878.      | L. Necrosis ankle.      | Nov. 11.       | 2-3    | A. post. flaps.  | Recov.  | Dec. 12, 1878.              | -  |
| 17  | M.   | 34   | Oct. 26, 1880.     | R. Chron. arthrit. ank. | Jan. 27, 1881. | 3      | Circular.        | Recov.  | April 1, 1881.              | -  |

## AMPUTATION OF THE LEG. PATHOLOGICAL. (Concluded.)

| No.           | Sex. | Age. | Date of Admission. | Nature of Disease. | Operation.       |        |                 | Result.                    | Date of Discharge or Death. | Remarks.    |
|---------------|------|------|--------------------|--------------------|------------------|--------|-----------------|----------------------------|-----------------------------|-------------|
|               |      |      |                    |                    | Date.            | Point. | Method.         |                            |                             |             |
| 13            | M.   | 42   | May 31, 1881.      | R. Necrosis ankle. | June 2.          | 2 — 3  | A. post. flaps. | Recov.                     | Aug. 8, 1881.               | Exhaustion. |
| 19            | M.   | 8    | April 13, 1882.    | R. Necrosis ankle. | May 5.           | 3      | Smiths.         | Recov.                     | July 19, 1882.              |             |
| 20            | F.   | 57   | Sept. 5, 1883.     | L. Gangrene foot.  | Sept. 5.         | 1      | A. post. flaps. | Died.                      | Sept. 11, 1883.             |             |
| Recovered, 18 |      |      |                    |                    | Reamputation, 1. |        |                 | Cause of death : Pyæmia, 1 |                             |             |
| Died, 2       |      |      |                    |                    |                  |        |                 | Exhaustion, 1              |                             |             |
| Total, 20     |      |      |                    |                    |                  |        |                 | Total, 2                   |                             |             |

## AMPUTATION OF THE FOOT. TRAUMATIC PRIMARY.

| No.          | Sex. | Age. | Date of Admission. | Nature of Injury. | Cause. | Operation. Method. | Result. | Date of Discharge or Death. | Remarks.  |
|--------------|------|------|--------------------|-------------------|--------|--------------------|---------|-----------------------------|---|
| 1            | M.   | 51   | June 28, 1878.     | R. Met. crushed.  | R. R.  | Lisfranc.          | Died.   | July 4, 1878.               | Pneum. Amp. L. leg. See Traumat. Prim., No. 5.  |
| 2            | M.   | 27   | April 2, 1878.     | R. Comp. fract.   | R. R.  | Chopart.           | Recov.  | June 19, 1878.              | Pyæmia. Amp. arm. See Traumat. Prim., No. 14.<br>Comp. fract. skull. Exfoliation of os frontis. |
| 3            | M.   | 8    | Dec. 4, 1879.      | Lacer. wound.     | R. R.  | Metatarsal.        | Died.   | Dec. 17, 1879.              |   |
| 4            | M.   | 7    | April 6, 1880.     | L. Lacer. wound.  | R. R.  | Lisfranc.          | Recov.  | Aug. 28, 1880.              |   |
| Recovered, 2 |      |      |                    |                   |        |                    |         |                             | Cause of death: Pneumonia, 1  |
| Died, 2      |      |      |                    |                   |        |                    |         |                             | Pyæmia, 1   |
| Total, 4     |      |      |                    |                   |        |                    |         |                             | Total, 2  |

## AMPUTATION OF THE FOOT. TRAUMATIC SECONDARY.

| No. | Sex. | Age. | Date of Admission. | Nature of Injury.  | Cause.         | Operation. |            | Result. | Date of Discharge or Death. | Remarks.                            |
|-----|------|------|--------------------|--------------------|----------------|------------|------------|---------|-----------------------------|-------------------------------------|
|     |      |      |                    |                    |                | Date.      | Method.    |         |                             |                                     |
| 1   | M.   | -    | Dec. 13, 1870.     | Crushed toes, gan. | Fall of box.   | Dec. 25.   | Metatars.  | Recov.  | Mar. 8, 1871.               | Amp. R. leg. See Traum. Sec. No. 4. |
| 2   | M.   | 40   | Sept. 6, 1881.     | L. Metat. crushed. | Fall of stone. | Sept. 23.  | Par. meta. | Recov.  | Nov. 3, 1881.               |                                     |

Recovered, 2.

## AMPUTATION OF THE FOOT. PATHOLOGICAL.

| No. | Sex. | Age. | Date of Admission. | Disease.                   | Operation. |          | Result. | Date of Discharge. | Remarks.  |
|-----|------|------|--------------------|----------------------------|------------|----------|---------|--------------------|---|
|     |      |      |                    |                            | Date.      | Method.  |         |                    |   |
| 1   | M.   | 42   | Jan. 11, 1872.     | Necrosis.                  | Jan. 13.   | Chopart. | Recov.  | Jan. 29, 1872.     | Original amputation 12 years previous. L. leg also amputated. See Leg Path. No. 12.<br>Toes amputated 17 years previous. Growth developed 2 years before admission. |
| 2   | F.   | 36   | May 28, 1873.      | R. Painful stump.          | May 30.    | -        | Recov.  | Aug. 14, 1873.     |   |
| 3   | M.   | 37   | Jan. 18, 1881.     | R. Malign. tumor of stump. | Jan. 24.   | Syme.    | Recov.  | Mar. 27, 1881.     |   |

Recovered, 3.

## SUMMARIES.

|                         |     |
|-------------------------|-----|
| Cases.....              | 111 |
| Double amputations..... | 9   |
| Reamputations.....      | 8   |
| Operations.....         | 123 |

## OPERATIONS.

|               | Traum. Prim. |        |       | Traum. Second. |        |       | Pathological. |        |       | Total. |        |       |
|---------------|--------------|--------|-------|----------------|--------|-------|---------------|--------|-------|--------|--------|-------|
|               | No.          | Recov. | Died. | No.            | Recov. | Died. | No.           | Recov. | Died. | No.    | Recov. | Died. |
| Shoulder..... | 2            | 2      | -     | -              | -      | -     | -             | -      | -     | 2      | 2      | -     |
| Arm.....      | 15           | 12     | 3     | 3              | 2      | 1     | 1             | 1      | -     | 19     | 15     | 4     |
| Fore-arm..... | 7            | 6      | 1     | 4              | 4      | -     | 1             | 1      | -     | 12     | 11     | 1     |
| Thigh.....    | 4            | 3      | 1     | 6              | 2      | 4     | 12            | 10     | 2     | 22     | 15     | 7     |
| Knee.....     | -            | -      | -     | -              | -      | -     | 8             | 2      | 1     | 8      | 2      | 1     |
| Leg.....      | 25           | 18     | 7     | 11             | 8      | 3     | 20            | 18     | 2     | 56     | 44     | 12    |
| Foot.....     | 4            | 2      | 2     | 2              | 2      | -     | 8             | 3      | -     | 9      | 7      | 2     |
| Total.....    | 57           | 43     | 14    | 26             | 18     | 8     | 40            | 35     | 5     | 123    | 96     | 27    |

## CASES.

|                                    | Traum. Prim. |        |       | Traum. Second. |        |       | Pathological. |        |       | Total. |        |       |
|------------------------------------|--------------|--------|-------|----------------|--------|-------|---------------|--------|-------|--------|--------|-------|
|                                    | No.          | Recov. | Died. | No.            | Recov. | Died. | No.           | Recov. | Died. | No.    | Recov. | Died. |
| Shoulder .....                     | 2            | 2      | -     | -              | -      | -     | -             | -      | -     | 2      | 2      | -     |
| Arm .....                          | 12           | 11     | 1     | 2              | 1      | 1     | 1             | 1      | -     | 15     | 12     | 2     |
| Fore-arm .....                     | 7            | 6      | 1     | 4              | 4      | -     | 1             | 1      | -     | 12     | 11     | 1     |
| Thigh .....                        | 4            | 3      | 1     | 6              | 2      | 4     | 11            | 9      | 2     | 21     | 14     | 7     |
| Knee .....                         | -            | -      | -     | -              | -      | -     | 2             | 1      | 1     | 2      | 1      | 1     |
| Leg .....                          | 20           | 15     | 5     | 7              | 4      | 3     | 18            | 16     | 2     | 45     | 35     | 10    |
| Foot .....                         | 2            | 2      | -     | 1              | 1      | -     | 2             | 2      | -     | 5      | 5      | -     |
| Single cases .....                 | 47           | 39     | 8     | 20             | 12     | 8     | 35            | 30     | 5     | 102    | 81     | 21    |
| Double .....                       | 4            | 1      | 3     | 2              | 2      | -     | 1             | 1      | -     | 7      | 4      | 3     |
|                                    | 51           | 40     | 11    | 22             | 14     | 8     | 36            | 31     | 5     | 109    | 85     | 24    |
| 2 cases T. P. and T. S. recovered. |              |        |       |                |        |       |               |        |       | 2      | 2      | -     |
| Total .....                        |              |        |       |                |        |       |               |        |       | 111    | 87     | 24    |

## DOUBLE AMPUTATIONS.

## TRAUMATIC PRIMARY.

|                           | Recovered. | Died. |
|---------------------------|------------|-------|
| 2 cases arm and leg ..... | 1          | 1     |
| 1 case arm and foot ..... | -          | 1     |
| 1 case leg and foot ..... | -          | 1     |

## TRAUMATIC SECONDARY.

|                           |   |   |
|---------------------------|---|---|
| 1 case both legs .....    | 1 | - |
| 1 case leg and foot ..... | 1 | - |

## TRAUMATIC PRIMARY AND SECONDARY.

|   |   |   |
|---|---|---|
| 1 case leg, traum. prim., leg, traum. sec. .... | 1 | - |
| 1 case leg, traum. prim., arm, traum. sec. .... | 1 | - |

## PATHOLOGICAL.

|                           |   |   |
|---------------------------|---|---|
| 1 case leg and foot ..... | 1 | - |
| 9 cases .....             | 6 | 3 |

## REAMPUTATIONS.

- 1 case leg, pathological,  
1 case leg, traum. prim. and knee, path.  
1 case knee, path., and thigh path.

3 cases. Recovered.

## MORTALITY.

| Cases.   | Cases.                               |
|--|--------------------------------------|
| Arm, traum. prim., shock .... 2                        | Leg, traum. prim., shock .... 1      |
| Arm, traum. prim., pyæmia... 1                         | Leg, traum. prim., pyæmia... 1       |
| Arm, traum. sec., pyæmia... 1                          | Leg, traum. prim., septicæmia 1      |
|  | Leg, traum. prim., pneumonia 1       |
|  | Leg, traum. sec., septicæmia... 2    |
|  | Leg, traum. sec., exhaustion... 1    |
| Fore-arm, traum. prim., shock 1                        | Leg, path., pyæmia ..... 1           |
|  | Leg, path., exhaustion..... 1        |
| Thigh, traum. prim., shock... 1                        |                                      |
| Thigh, traum. sec., pyæmia... 2                        |                                      |
| Thigh, traum. sec., shock ... 1                        |                                      |
| Thigh, traum. sec., erysipelas. 1                      |                                      |
| Thigh, path., pyæmia ..... 1                           |                                      |
| Thigh, path., shock ..... 1                            |                                      |
|  | RECAPITULATION.                      |
|  | Shock ..... 8                        |
|  | Pyæmia ..... 7                       |
|  | Exhaustion ..... 4                   |
|  | Septicæmia ..... 3                   |
|  | Pneumonia ..... 1                    |
| Knee, path., shock ..... 1                             | Erysipelas ..... 1                   |
| Leg, traum. prim., exhaustion. 2                       | Total ..... 24                       |
|  | Death-rate.                          |
| Primary ..... 51 cases. 11 deaths. 21.57 per cent.     |                                      |
| Secondary ..... 22 cases. 8 deaths. 36.36 per cent.    |                                      |
| Primary and Secondary ..... 2 cases. -                 |                                      |
|  | 75 cases. 19 deaths. 26.03 per cent. |
| Pathological ..... 36 cases. 5 deaths. 13.88 per cent. |                                      |
| Total ..... 111 cases. 24 deaths. 21.62 per cent.      |                                      |

Although these numbers are small it may not be uninteresting to compare them with the statistics given

by Dr. Ashhurst in the International Encyclopædia of Surgery, and by Professor Agnew in his work on Surgery:—

## ASHHURST.

|                           | Death-rate.    |
|---------------------------|----------------|
| Total, 6448 cases .....   | 32.9 per cent. |
| Injury, 3024 cases .....  | 39.8 per cent. |
| Disease, 3424 cases ..... | 26.8 per cent. |

## AGNEW.

|                            |                 |
|----------------------------|-----------------|
| 5956 cases .....           | 32.42 per cent. |
| Primary, 2572 cases .....  | 35.81 per cent. |
| Secondary, 781 cases ..... | 50.19 per cent. |
| 2603 cases .....           | 23.74 per cent. |

Dr. Agnew also gives the mortality of all amputations at the Pennsylvania Hospital for the years 1870–1878 as 21.43 per cent. in 252 cases. It is more than probable that the next ten years will witness in all well-managed hospitals a decided diminution in the death-rate following amputation.

PROVIDENCE, April 11, 1884.

## TWO CASES OF GENERAL CHRONIC PROCTITIS

CAUSED BY RETROVERSION OF THE UTERUS WITH PROLAPSE OF RIGHT OVARY IN THE FIRST CASE, BY SIMPLE RETROVERSION OF THE UTERUS WITH CHRONIC ENDOMETRITIS IN THE SECOND CASE.

BY F. W. JOHNSON, M. D.,

Surgeon, Out Patients, Free Hospital for Women.

INFLAMMATION of the rectum involving the mucous, submucous, and muscular layers of the gut is of quite frequent occurrence in women suffering from some acute or chronic affection of the ovaries, tubes, uterus, or vagina. The onset of the attack is not marked. According to my experience, limited to six cases, the inflammation does not begin as an acute proctitis which gradually subsides into the chronic form, but from a feeling of burning and weight in the rectum with perhaps some backache, frequent micturition, watery stools soon after rising in the morning, followed by a feeling as if the rectum had not been emptied, it gradually increases until the patient is driven to the physician complaining of loose muco-purulent dejections which are sometimes mixed with blood, tenesmus, frequent and painful micturition, sometimes retention, con-