

wards, that this affected tooth was the second lower molar, and we removed it.

This was not the first time I had seen deep temporo-submasseteric phlegmon follow dental caries. In two of my private patients the suppuration invaded not only the submasseteric portion, but also the subtemporal portion of the phlegmon. I considered it necessary to make two incisions, one through the temporal, the other through the masseter muscle, and to pass a drainage tube from one to the other, in order to assure the evacuation of the collection. In one of the patients, the incision of the temporal muscle occasioned a flow of arterial blood, which rendered a rather laborious ligation necessary. Both patients recovered without necrosis of the branch of the maxilla, and did not even have the alveolar necrosis which we observed in our last patient.

Things did not pass so happily in a man whom I treated at La Pitié in 1867. After the submasseteric collection had been opened, purulent infection occurred and caused death. I did not find the maxilla denuded to a very great extent, nor its parenchyma in suppuration; the purulent infection seemed to me to have been caused by septicæmia consecutive to the decomposition of blood and of pus in the deep pouch.

The possibility of this complication authorizes me to tell you that the indication in abscesses of this kind is to open early and freely, and in both regions (of the masseter and temporal), when fluctuation can be sent from one to the other; in one alone, the first, when the collection remains exclusively submasseteric. Stagnation, and consequent decomposition, of the pus in the bottom of the foyer must be afterwards avoided by means of repeated washings.

As for the patient, we have only to wait for the elimination of the necrosis of the lower jaw, which is more extensive than usual, but still quite limited, and to advise frequent washings of the mouth, so as not to allow the pus to be swallowed.

INDEX.

- A**BSCESS, acute subperiosteal, 49
 dental, 338
 submasseteric, 344, 346
 metastatic in pyæmia, 237
 neighbouring, or by proximity, 41, 311
 Absorption, by granulating surfaces, 230, 246
 by marrow of bones, 233, 246
 Adolescence, period of, 1
 Amputation, after compound fracture, 109, 115, 186, 268
 Anchylosis of knee, 39, 295
 Apparatus, for fracture of clavicle, 208
 of leg, open and enveloping, 87
 of patella, 148
 of thigh, 165
 immovable, 88
 Arthritis, after fracture, 129, 156, 186
 chronic, 298
 dry and deforming, 314, 324
 four varieties, 320
 etiology, 320
 treatment, 321
 fungoid, 304. *See* Fungoid.
 gonorrhœal, 290
 in pyæmia, 239
 osteo-arthritis, 50
 rheumatic, 325
 spontaneous, 290, 323
 traumatic, 285, 322
 modes of termination, 288
 therapeutical indications, 289
- B**ED, mechanical, 82.
- C**ALLUS, external or musculo-periosteal, 64
 in cancellous tissue, 73
 in compound fracture, 76, 77
 interfragmentary, 68
 provisional and permanent, 69
 Compound fracture, amputation in, 109, 115, 186, 268
 avoidance of suppuration by occludent dressing, 105
 consolidation after, 75
 diagnosis, 101
- Compound fracture, emphysema, 112
 termination without suppuration, 103
 with osteitis and necrosis, 103
 with putrid osteo-myelitis, 103
 treatment after suppuration has begun, 107
 Compound fracture of limbs, cases of, 101, 107, 111, 112, 114, 132, 186, 211, 227, 236, 327
 of skull, case of, 216
 of an exostosis, case of, 17
 Consolidation after fracture of shaft of long bones. 1st period, 63
 2d period, 66
 participation of marrow, 67
 effect upon the ends of the bone, 67
 in over-riding fractures, 68
 3d period, 68
 condensing osteitis, 69
 4th period, 70
 obliteration of veins, 70
 synovitis of tendons, 70
 muscular atrophy, 71
 Consolidation after fracture of extremities of long bones, 72
 shortening caused by absorption, 73
 peculiarities of callus, 73
 subsequent synovitis, 74
 Consolidation after fracture of the short and flat bones, 74
 Consolidation after compound suppurating fractures, 75
 Consolidation, delay of, 132
 influence of light upon, 88
 Cotton dressing of A. Guérin, 266
 Crepitus, methods of obtaining, 117
 Crushing of bone, its influence in the production of deformity, 122, 196, 204
- D**EFORMITY after fracture, 126
 influence of crushing, 122, 196, 204
 Dental abscess, 338
 submasseteric, 344, 346
 fistula, 342
 Dextrine bandage, 88

Diseases of youth, definition, 37
 Dislocation, rules for making diagnosis, 276
 as applied to elbow, 280
 hip, 282
 shoulder, 277
 Displacement in fracture, cause of, 79, 95,
 98
 Dolbeau, on the etiology of phlegmon of the
 forearm, 335

ELBOW, dislocation, 280
 resection, 227

Emphysema in compound fracture, 112
 Examination to detect fracture, 78
 Exostosis, epiphysary, of development, 14
 complicated by a cyst, 16
 compound fracture of, death, 17
 diagnosis, 14
 etiology, 15
 prognosis, 16
 treatment, 15
 Exostosis of 7th cervical vertebra, 16
 Exostosis, subungual, of toe, 9
 influence of age in its production, 11
 of sex, 11
 pathological anatomy, 12
 treatment, 13
 Extension, continuous, in fracture of thigh,
 164

FEMUR, acute epiphysary osteitis, 45
 exostosis, 17
 fracture, 155-193. *See* Fracture.
 hyperostosis, 39

Finger, phlegmon, 327
 synovial sheath of, 329
 Fistula, dental, 342
 Forearm, phlegmon, 332
 Dolbeau's theory of etiology, 335
 Fracture of clavicle by muscular action,
 206
 treatment, 208
 Fracture of femur, shaft.
 diagnosis, 155
 prognosis, 158
 treatment, 160
 continuous extension, 164
 Fracture of femur, neck.
 diagnosis, 167
 extra- and intra-capsular, 168
 prognosis, 175
 treatment, 178
 case of ununited intra-capsular
 fracture, with restoration of
 functions; autopsy, 177
 Fracture of femur, lower end.
 simple supra-condyloid, 180
 symptoms, 180
 prognosis, 182
 treatment, 183
 supra- and inter-condyloid, 184
 Fracture of femur, spontaneous, 187
 iterative, 191

Fracture of the leg, at junction of lower
 and middle thirds.
 method of examination, 78
 with displacement, 79
 reduction by extension, 80
 treatment by wire splint, 81, 82
 phlyctæna, 81
 prognosis, 82
 length of time required to harden
 callus, 84
 open apparatuses, 87
 enveloping apparatuses, 87
 immovable bandage, 88
 precautions in applying, 89

Fracture of the leg, V-shaped, 90
 its pathology, 91
 character of the displacement, 95
 treatment, 96
 with irreducible displacement, 97
 Fracture of leg, lower third, with projection
 of lower fragment, 99
 with angular projection forward, 99
 Fracture of the leg, with engagement of
 the point of the fragment in the skin, 100
 Fracture of the leg, bimalleolar, 116
 method of reduction, 117
 prognosis, 117
 treatment, 120

Fracture of the leg, supra-malleolar, 121
 difficulty of retention of fragments,
 122
 imminence of eschar, 123
 Fracture of the leg, consecutive and late
 phenomena, 124
 arthritis, 129
 deformity, 126
 delay of consolidation, 132
 hyperostosis, 126
 muscular atrophy, 124
 obliteration of veins, 131
 osteo-neuralgia, 127
 rotation outwards of upper fragment,
 129

Fracture of patella, recovery with wide
 separation, 138
 study of the functions of the limb, 136
 causes of the separation, 139
 Fracture of patella, recent.
 symptoms, 141
 prognosis, 142
 ankylosis, 142
 statistics, 143
 treatment, 145
 sprain of the callus, 154

Fracture of lower end of radius.
 late results, 193
 diagnosis, 198
 mechanism, 199
 treatment, 201
 Fracture, repair. *See* Consolidation.

GONORRHOËAL arthritis of knee, 290
 Guérin's cotton dressing, 266
 Gunshot wounds, 236, 255, 260, 268

HAND, abscess of, 328
 Heberden's nodosities, 325
 Hennequin's apparatus for fracture of
 thigh, 165
 Hip, dislocation of, 282
 Hydrarthrosis, 299
 prognosis, 301
 treatment, 302
 Hyperostosis, 39, 126
 associated with necrosis, 218
 its indication in arthritis, 295
 of patella, in chronic arthritis, 301

IMMOBILITY, a cause of ankylosis, 295
 Immovable bandages, 88
 Impaction in fracture, 122, 172, 178, 185
 Ingrown toe-nail, 1
 origin, 3
 prophylaxis, 3
 treatment, 6
 Iterative fracture of thigh, 163

KNEE, acute gonorrhœal arthritis, 290
 ankylosis, 39, 295
 contusion and sprain, 286
 penetrating wound of, 284
 subacute, non-suppurating epiphysary
 osteitis, 31
 suppurating arthritis, 45

LISTER'S dressing, 272

MALGAIGNE'S hooks for patella, 148
 Malgaigne's point, 96
 Mechanical bed, 82

NASO-PHARYNGEAL fibrous polyp, 18
 influence of age and sex, 19
 statistics of operations, 21
 palliative operation, 23
 paralysis and exophthalmia in, 23
 treatment, 28
 Necrosis, etiology, 218
 in long and short bones, 222
 Neuralgia after fracture, 127

OSTEITIS, acute epiphysary of youth.
 statistics of age of patients, 37
 causing hyperostosis of femur, and
 ankylosis of knee, 39
 pathology, 40
 of lower end of tibia, 41
 causing necrosis, 42
 prognosis, 43
 treatment, 44
 of femur with suppurating arthritis of
 knee, 45
 pathology, 46

Osteitis, synonyms, 47
 differences of location, 48
 intensity, 49
 diagnosis, 50
 Osteitis, subacute, non-suppurating epi-
 physary.
 of the knee, 31
 prognosis, 32
 of the great trochanter, 33
 chance of suppuration, 35
 treatment, 35
 Osteitis, condensing, after fracture, 69
 Osteitis, its connection with scrofula, 222
 spontaneous, 222
 etiology, 224
 Osteitis, traumatic of long bones, 211
 pathology, 212, 214, 216, 220
 Osteo-myelitis, 47
 after compound fracture, 76, 77, 211
 Osteo-myelitis, putrid and diffuse.
 1st degree, 213
 2d degree, after amputation of thigh,
 214
 accompanying putrid phlebitis,
 215
 non-putrid phlebitis, 216

PATELLA, hyperostosis of, its indication
 in arthritis, 301
 Patella, non-consolidated fracture.
 study of movements and functions, 136
 study of causes of non-union, 139. *See*
 also Fracture.
 Penetrating wound of knee, 284
 Periostitis, acute, 49
 Phlebitis, in putrid osteo-myelitis, 215, 216
 as cause of purulent infection, 242,
 246
 Phlegmon of forearm, 332
 Dolbeau's theory, 335
 Phlyctæna after fracture, 81
 Planchette polydactyle, 86
 Plaster splints, 87
 bandage, 88
 Polyp, clinical meaning, 20. *See* Naso-pharyngeal.
 Porte-ligature of Hatin, 29
 Pseudarthrosis, 133, 191
 operation to relieve, 135
 Purulent infection, 216, 236
 autopsies, 236
 etiology, 241
 author's theory, 248
 anatomical causes, 254
 general causes, 254
 treatment, 260. *See* also Septicæmia.
 Pyæmia, 236. *See* Purulent infection and
 Septicæmia.

RADIUS, fracture of, 193-205. *See* Frac-
 ture.
 Rarefaction, senile, of bone, 189, 201
 Rheumatic arthritis, 325

- SCROFULA**, its relation to osteitis, 222
 Scultet's apparatus for treatment of fracture, 85
- Septicæmia**, 212, 231
 etiology, 232, 243
 anatomical causes, 254
 general causes, 254
 treatment and prophylaxis, 260
 by immediate union, 263
 infrequent dressing, 265
 Guérin's dressing, 266
 pneumatic occlusion, 271
 disinfecting dressings, 272
- Septicæmia**, bastard, 328
- Sequestrum**, method of search, 223
 removal, 223
- Shortening** after fracture, 73
- Shoulder**, dislocation, 277
- Silicated bandage**, 89
- Splenization** of bone, 308
- Synovial sac** of fingers, 329
- Synovitis**, after fracture, 70, 74
 of flexors of the fingers, 328
- TARSALGIA** of adolescents, 51
 1st degree, history and symptoms, 51
 autopsy, 53
 etiology, 54
 course, 56
 treatment, 57
- Tarsalgia**, 2d degree, 58
 Duchenne's theory, 55, 59
 3d and 4th degrees, 60
- Tendo Achillis**, its division after fracture of leg, 100
- Toe-nail**, ingrown, 1. *See* Ingrown.
- Traumatic fever**, intense.
 autopsy, 212
 course, 228
 forerunner of suppuration, 229
 synonyms, 229
 experiments to discover cause, 230
 etiology, 234
 treatment, 235, 260
- V-SHAPED** fractures, 90. *See* Fracture of leg.
- Veins**, in pyæmia and osteo-myelitis, 215, 216, 241
 obliteration of, after fracture, 70, 131
- Vertebra**, exostosis of 7th cervical, 16
- WHITE** swelling, 304. *See* Fungoid arthritis.
- YOUTH**, diseases of, definition, 37

LECTURE XXVII.

STIMULANTS IN FEVER—Views as to the nutrient properties of stimulants are to be received with caution—*Anticipative* use of stimulants—Meaning of the term—Considerations to be taken into account in resolving upon this method of treatment: (1) prevailing epidemic character of the disease, (2) previous condition of the patient ("Sinking of vital power"—Illustrative case—Stimulation often unsuccessful in the intemperate, and in those whose brains are overworked), (3) development of symptoms of severe typhus, (4) development of *fever odour*—Contrast between typhus and typhoid as regards period at which stimulation is called for—*Condition of the heart, a guide*—Physical signs of cardiac weakening.

FOLLOWING the consideration of food in fever we shall next take up that of diffusible stimulants. Their employment we have had together a full opportunity of studying, and those of you who are practising pupils have learned to prove their value and importance in every form of fever. You have learned also to avoid routinism, and you well know that when we speak of every form of fever we do not mean every case of the disease. We have had cases in which no wine was used, in which it was sparingly employed, where it was not used until after the middle period of the fever. In many cases, too, you had to use it and other stimulants with great boldness and for many days, beginning at an early stage of the disease. Again, wine had sometimes to be omitted, though the disease still was running on; and, lastly, its exhibition or its withdrawal had to be alternated several times in the course of the disease.

Many of you have also learned that in fever the common error of delaying the giving of stimulants to a very late period of the case is a practice fraught with mischief, attributable to the prevalence of the doctrine that fever and all its local symptoms were induced by inflammation. By this system all the good of the anticipative use of stimulants is lost.

Any unbiassed observer of fever will admit that between the condition of vital prostration and what is termed "waste of animal tissue" there is no constant relation. We cannot deny the occurrence of metamorphosis of tissue and waste of organic substance as incidental to fever; on the contrary, we believe that these phenomena are remarkably perceptible. But we must also hold that there is a prostration of vital energy—a thing *per se*, which is totally unconnected with loss of organic substance. Do not for a moment forget this—that the