INDEX TO VOLUME 28

Acidophilus milk, Bacteriological changes in, at room and ice-box temperatures................................................. 489
Alginic acid, Bacteria decomposing....................................................... 213
Allen, Melvin C., Waksman, Selman A. and Carey, Cornelia L. Bacteria decomposing alginic acid................................. 213
Amino acids, aromatic, The synthesis of, from inorganic nitrogen by molds and the value of mold proteins in diets.................. 95
Ammonia-producing microorganisms. The growth and metabolism of mixed cultures of........................................... 159
Anaerobes, A corn-liver medium for the detection and dilution counts of various. Studies on anaerobic bacteria. I.................. 267
Anaerobic bacteria, Studies on. I. A corn-liver medium for the detection and dilution counts of various anaerobes............. 267

B. mesentericus and B. vulgatus, Variation and filtrability studies on........... 1
B. vulgatus, Variation and filtrability studies on B. mesentericus and........... 1
Bacillus, Isolation of an obligately anaerobic, from the feces of newborn infants and from other human sources, and its probable identity with the "Köpfchenbakterien" of Escherich, Rodella's "Bacillus III," and Bacillus paraputreficicus. (Bienstock)............................................. 181
—— mycoides, Cell inclusions and endospore formations in.......................... 133
—— paraputreficicus (Bienstock), Isolation of an obligately anaerobic bacillus from the feces of newborn infants and from other human sources, and its probable identity with the "Köpfchenbakterien" of Escherich, Rodella's "Bacillus III," and............................................. 181
—— Pasteuri group, An investigation of the. I. Description of strains isolated from soils and manures........................................... 295
—— ———, An investigation of the. II. Special physiology of the organisms............................................................................. 313
—— radiobacter, Studies on certain physiological characters of Phytomonas tumefaciens, Phytomonas rhizogenes and. Part I..................... 571
—— ———, Studies on certain physiological characters of Phytomonas tumefaciens, Phytomonas rhizogenes and. Part II.............................. 597
Bact. coli, A comparative study of certain media used in presumptive tests for............................................................................ 199
Bacteria, A comparison of lead, bismuth, and iron as detectors of hydrogen sulphide produced by................................................. 169
—— decomposing alginic acid................................................................... 213
——, On the enzymes of, and bacterial metabolism.................................. 447
——, On the pleomorphism of................................................................... 111
——, The occurrence of carotene in. The relation of microorganisms to carotenoids and vitamin A. I................................................. 31
Bacterial metabolism, On the enzymes of bacteria and.......................... 447
— physiology, The disagreement in mitogenetic experiments, a problem in. 153
— variation with special reference to behavior of some mutabile strains
  of colon bacteria in synthetic media.......................................... 619
Bacteriological changes in acidophilus milk at room and ice-box temper-
  atures.................................................................................. 489
Bacteriophages, Comparison of lytic agents and, upon pyocyanus cultures.
  Studies on bacteriophage. II....................................................... 237
—, Relation of, and other lytic agents to negative stool cultures. Study
  of two cases. Studies on bacteriophage. I............................................... 221
—, Studies on. I. Relation of bacteriophage and other lytic agents to
  negative stool cultures. Study of two cases.................................................. 221
—, Studies on. II. Comparison of action of lytic agents and bacterio-
  phages upon pyocyanus cultures......................................................... 237
Baldwin, I. L., Riker, A. J. and Hendrickson, A. A. Studies on certain
  physiological characters of Phytomonas tumefaciens, Phytomonas rhizo-
  genes and Bacillus radiobacter. Part II............................................... 597
Baldwin, I. L., Sagen, H. E. and Riker, A. J. Studies on certain physiologi-
  cal characters of Phytomonas tumefaciens, Phytomonas rhizogenes and
  Bacillus radiobacter. Part I.............................................................. 571
Basal, A, medium for the primary isolation of pathogens. A quickly pre-
  pared medium including accessory growth factors from fish roe or quah-
  ous......................................................... 323
Baumann, Carl A. and Ingraham, Mary A. The relation of microorganisms
  to carotenoids and vitamin A. I. The occurrence of carotene in bacteria. 31
Bayne-Jones, S. William Henry Welch 1850–1934.................................. 433
Beard, P. J., Clifton, C. E. and Cleary, J. P. Oxidation-reduction potentials
  and ferricyanide reducing activities in peptone cultures and suspensions
  of Escherichia coli............................................................................. 541
Berens, Conrad, Chapman, George H., Peters, Adeline and Curcio, Lillian.
  Coagulase and hemolysin tests as measures of the pathogenicity of
  staphylococci....................................................... 343
Brucella groups, Variations in the electrophoretic mobilities of the...... 127

Capsule, transverse, An organism with a................................. 41
Capsules in young cultures of Streptococcus hemolyticus................. 451
Carbohydrates of the pneumococcus, A systematic study of microorganisms
  which decompose the specific....................................................... 415
Carey, Cornelia L., Waksman, Selman A. and Allen, Melvin C. Bacteria
  decomposing alginic acid.............................................................. 213
Carotene, The occurrence of, in bacteria. The relation of microorganisms to
  carotenoids and vitamin A. I.......................................................... 31
Carotenoids, The relation of, to microorganisms and vitamin A. I. The
  occurrence of carotene in bacteria.................................................. 31
Cell inclusions and endospore formation in Bacillus mycoides............ 133
Chapman, George H., Berens, Conrad, Peters, Adeline and Curcio, Lillian.
  Coagulase and hemolysin tests as measures of the pathogenicity of
  staphylococci....................................................... 343
INDEX

Cleary, J. P., Beard, P. J. and Clifton, C. E. Oxidation-reduction potentials and ferricyanide reducing activities in peptone cultures and suspensions of Escherichia coli .......................................................... 541
Cleary, J. P. and Clifton, C. E. Oxidation-reduction potentials and ferricyanide reducing activities in glucose-peptone cultures and suspensions of Escherichia coli .......................................................... 561
Clifton, C. E. and Cleary, J. P. Oxidation-reduction potentials and ferricyanide reducing activities in glucose-peptone cultures and suspensions of Escherichia coli .......................................................... 561
— — and Beard, P. J. Oxidation-reduction potentials and ferricyanide reducing activities in peptone cultures and suspensions of Escherichia coli .......................................................... 541
Coagulase and hemolysin tests as measures of the pathogenicity of staphylococci .......................................................... 343
Colon bacilli, Spoilage of olives by .......................................................... 249
— — bacteria in synthetic media, Bacterial variation with special reference to behavior of some mutable strains of .......................................................... 619
Comparative, A, study of certain media used in presumptive tests for Bact. coli .......................................................... 199
Comparison, A, of lead, bismuth, and iron as detectors of hydrogen sulphide produced by bacteria .......................................................... 169
Corn-liver medium, A, for the detection and dilution counts of various anaerobes, Studies on anaerobic bacteria I .......................................................... 267
Cultivation of organisms concerned in the oxidation of thiosulfate .......................................................... 365
Curcio, Lillian, Chapman, George H., Berens, Conrad, and Peters, Adeline. Coagulase and hemolysin tests as measures of the pathogenicity of staphylococci .......................................................... 343
Detectors, A comparison of lead, bismuth, and iron as, of hydrogen sulphide produced by bacteria .......................................................... 169
Deuterium, The effect of, on the growth of yeast .......................................................... 289
Diets, The synthesis of aromatic amino acids from inorganic nitrogen by molds and the value of mold proteins in .......................................................... 95
Disagreement, The, in mitogenetic experiments, a problem in bacterial physiology .......................................................... 153
Electrophoretic mobilities, Variations in the, of the Brucella groups .......................................................... 127
Endospore formation, Cell inclusions and, in Bacillus mycoides .......................................................... 133
Enzymes, On the, of bacteria and bacterial metabolism .......................................................... 447
Escherichia coli, Oxidation-reduction potentials and ferricyanide reducing activities in glucose-peptone cultures and suspensions of .......................................................... 561
— — — —, Oxidation-reduction potentials and ferricyanide reducing activities in peptone cultures and suspensions of .......................................................... 541
Etchells, John L., Kopeloff, Lenore M. and Kopeloff, Nicholas. Bacteriologi
cal changes in acidophilus milk at room and ice-box temperatures .......................................................... 489
Evaluation of some factors influencing the phenol resistance of Staphylococcus aureus .......................................................... 333
Feltham, Catherine B. and ZoBell, Claude E. A comparison of lead, bismuth and iron as detectors of hydrogen sulphide produced by bacteria........ 169
Ferricyanide reducing activities in glucose-peptone cultures and suspensions of Escherichia coli; Oxidation-reduction potentials and.......... 561
— reducing activities, Oxidation-reduction potentials and, in peptone cultures and suspensions of Escherichia coli......................... 541
Filtrability studies on B. mesentericus and B. vulgatus, Variation and........ 1
Fish roe or quahaugs, A quickly prepared medium including accessory growth factors from. A basal medium for the primary isolation of pathogens... 323
Flynn, Catherine S. and Retterger, L. F. Variation and filtrability studies in B. mesentericus and B. vulgatus.............................. 1

Gibson, T. An investigation of the Bacillus Pasteuri group. I. Description of strains isolated from soils and manures.......................... 295
— An investigation of the Bacillus Pasteuri group. II. Special physiology of the organisms......................................................... 313
Glucose-peptone cultures and suspensions of Escherichia coli, Oxidation-reduction potentials and ferricyanide reducing activities in........ 561
Greaves, J. D., Greaves, J. E. and Hickman, Iola. The growth and metabolism of mixed cultures of ammonia-producing microorganisms...... 159
Greaves, J. E., Greaves, J. D. and Hickman, Iola. The growth and metabolism of mixed cultures of ammonia-producing microorganisms...... 159
Growth factors, A quickly prepared medium including accessory, from fish roe or quahaugs. A basal medium for the primary isolation of pathogens. 323
— retardation by freshly distilled water........................................... 21
— The, and metabolism of mixed cultures of ammonia-producing microorganisms........................................................................... 159

Hall, Ivan C. and Snyder, Marshall L. Isolation of an obligately anaerobic bacillus from the feces of newborn infants and from other human sources, and its probable identity with the “Köpfchenbakterien” of Escherich, Rodella’s “Bacillus III,” and Bacillus paraputifericus (Bienstock)..... 181
Hegarty, C. P. and Rahn, Otto. Growth retardation by freshly distilled water................................................................. 21
Heifetz, Arthur and Horwood, M. P. A comparative study of certain media used in presumptive tests for Bact. coli................................ 199
Hemolysin tests, Coagulase and, as measures of the pathogenicity of staphylococci................................................................. 343
Hendrickson, A. A., Baldwin, I. L. and Riker, A. J. Studies on certain physiological characters of Phytomonas tumefaciens, Phytomonas rhizogenes and Bacillus radiobacter. Part II........................................... 597
Herrick, H. T. and May, O. E. Some practical and theoretical aspects of mold metabolism.......................................................... 145
Herrington, B. L. A note regarding the lag period........................... 177
Hickman, Iola, Greaves, J. E. and Greaves, J. D. The growth and metabolism of mixed cultures of ammonia-producing microorganisms... 159
Hitchner, E. R. Some physiological characteristics of the propionic-acid bacteria................................................................. 473
INDEX

Horwood, M. P. and Heifetz, Arthur. A comparative study of certain media used in presumptive tests for Bact. coli ................................................. 199
Hughes, T. P. A partial purification of yellow fever virus through adsorption and elution ................................................................. 401
Hydrogen sulphide, A comparison of lead, bismuth, and iron as detectors of, produced by bacteria ...................................................... 169
Ingraham, Mary A. and Baumann, Carl A. The relation of microorganisms to carotenoids and vitamin A. I. The occurrence of carotene in bacteria. 31
Investigation, An, of the Bacillus Pasteuri group. I. Description of strains isolated from soils and manures ........................................ 295
—, An, of the Bacillus Pasteuri group II. Special physiology of the organisms .................................................................................. 313
Isolation of an obligately anaerobic bacillus from the feces of newborn infants and from other human sources, and its probable identity with the "Köpfchenbakterien" of Escherich, Rodella's "Bacillus III," and Bacillus paraputrireus (Bienstock) .................................................. 181
James, W. E. A basal metabolism for the primary isolation of pathogens. A quickly prepared medium including accessory growth factors from fish roe or quahaus ....................................................... 323
Jennison, M. W. A note on the Richards-Jahn photoelectric nephelometer. 107
Joffe, Eleanore W. and Smith, Dorothea E. Variations in the electrophoretic mobilities of the Brucella groups ........................................ 127
Kobel, Maria and Neuberg, Carl. Present status of the problem of sugar fermentation ................................................................. 461
Kopeloff, Lenore M., Etchells, John L. and Kopeloff, Nicholas. Bacteriological changes in acidophilus milk at room and ice-box temperatures ...... 489
—, Nicholas, Kopeloff, Lenore M. and Etchells, John L. Bacteriological changes in acidophilus milk at room and ice-box temperatures. .. 489
"Köpfchenbakterien" of Escherich, Rodella's "Bacillus III," and Bacillus paraputrireus (Bienstock), Isolation of an obligately anaerobic bacillus from the feces of newborn infants and from other human sources, and its probable identity with ................................................................. 181
Kritschewski, I. L. and Ponomarewa, I. W. On the pleomorphism of bacteria. 111

Lactobacillus bifidus ........................................................................ 501
Lag period, A note regarding the ................................................. 177
Lewis, I. M. Bacterial variation with special reference to behavior of some mutable strains of colon bacteria in synthetic media ................. 619
Lewis, I. M. Cell inclusions and endospore formation in Bacillus mycoides. 133
Lytic agents and bacteriophages, Comparison of action of, upon pyocyaneus cultures. Studies on bacteriophage. II ......................... 237
— —, Relation of bacteriophage and other, to negative stool cultures. Study of two cases. Studies on bacteriophage. I ................. 221
Manures, Description of strains isolated from soils and. An investigation of the Bacillus Pasteuri group. I ........................................ 295
INDEX

May, O. E. and Herrick, H. T. Some practical and theoretical aspects of mold metabolism................................................. 145
McClung, L. S. and McCoy, Elizabeth. Studies on anaerobic bacteria. I. A corn-liver medium for the detection and dilution counts of various anaerobes........................................................................... 267
McCoy, Elizabeth and McClung, L. S. Studies on anaerobic bacteria. I. A corn-liver medium for the detection and dilution counts of various anaerobes................................................................. 267
Mechanical, A, device which prepares and inoculates rolled tubes.................. 279
Microorganisms, The production of polythionates from thiosulfate by........... 387
—, The relation of, to carotenoids and vitamin A. I. The occurrence of carotene in bacteria................................................................. 31
— which decompose the specific carbohydrates of the pneumococcus, A systematic study of................................. 415
Mitogenetic experiments, The disagreement in, a problem in bacterial physiology................................................................................. 153
Mold metabolism, Some practical and theoretical aspects of.................... 145
— proteins, The synthesis of aromatic amino acids from inorganic nitrogen by molds and the value of, in diets.................. 95

Nephelometer, A note on the Richards-Jahn photoelectric......................... 107
Neuberg, Carl and Kobel, Maria. Present status of the problem of sugar fermentation..................................................................................... 461
Nitrogen, inorganic, The synthesis of aromatic amino acids from, by molds and the value of mold proteins in diets..................... 95
Note, A, on the Richards-Jahn photoelectric nephelometer....................... 107
—, A, regarding the lag period.......................................................... 177

Olives, Spoilage of, by colon bacilli..................................................... 249
On the enzymes of bacteria and bacterial metabolism............................... 447
On the pleomorphism of bacteria.......................................................... 111
Organism, An, with a transverse capsule.................................................. 41
Oxidation of thiosulfate, Cultivation of organisms concerned in the........... 365
— reduction potentials and ferricyanide reducing activities in glucose-peptone cultures and suspensions of Escherichia coli...................... 541
— potentials and ferricyanide reducing activities in peptone cultures and suspensions of Escherichia coli.................................................. 541

Partial, A, purification of yellow fever virus through adsorption and elution. 401
Pathogenicity of staphylococci, coagulase and hemolysin tests as measures of the................................................................................ 343
Pathogens, A basal medium for the primary isolation of. A quickly prepared medium including accessory growth factors from fish roe or quahogs................................. 323
Paul, John R. Pneumococcus variants. I. Intermediate forms and the influence of environment in their production during in-vitro S to R and R to S transitions................................................................. 45
— Pneumococcus variants. II. Dissociants of R pneumococci and their relation to Streptococcus viridans............................ 69
Peptone cultures and suspensions of *Escherichia coli*, Oxidation-reduction potentials and ferricyanide reducing activities in. .......................... 541
Peters, Adeline, Chapman, George H., Berens, Conrad, and Curcio, Lillian. Coagulase and hemolysin tests as measures of the pathogenicity of staphylococci ........................................... 343
Phenol resistance of *Staphylococcus aureus*, Evaluation of some factors influencing the ............................................................ 333
Physiological characteristics, Some, of the propionic-acid bacteria. ........ 473
Physiology, Special, of the organisms. An investigation of the *Bacillus Pasteurii* group. II ....................................................... 313
*Phytoponas rhizogenes*, and *Bacillus radiobacter*, Studies on certain physiological characters of *Phytoponas tumefaciens*. Part I. .......... 571
— — and *Bacillus radiobacter*, Studies on certain physiological charac-
ters of. Part II ............................................................. 597
— *tumefaciens*, *Phytoponas rhizogenes*, and *Bacillus radiobacter*, Studies on certain physiological characters of. Part I. .......... 571
— —, *Phytoponas rhizogenes* and *Bacillus radiobacter*. Studies on certain physiological characters of. Part II ........................................... 597
Pleomorphism of bacteria, On the ........................................ 111
Pneumococcus variants. I. Intermediate forms and the influence of environ-
ment in their production during in-vitro S to R and R to S transitions.. 45
— variants. II. Dissociants of R pneumococci and their relation to *Streptococcus viridans* .......................................................... 69
Polythionates, The production of, from thiosulfate by microorganisms .... 387
Ponomarewa, I. W. and Kritschewski, I. L. On the pleomorphism of bacteria .......................................................... 111
Poole, Allan K. and Welch, Henry. The pleo-antigenicity of a variant of *Proteus X19* .............................................................. 523
Present status of the problem of sugar fermentation .......................... 461
Presumptive tests for *Bact. coli*, A comparative study of certain media
used in ................................................................. 199
Production, The, of polythionates from thiosulfate by microorganisms. .......... 387
Propionic-acid bacteria, Some physiological characteristics of the .......... 473
*Proteus X19*, The pleo-antigenicity of a variant of ......................... 523
Pyocyanes cultures, Comparison of action of lytic agents and bacteriophages
upon. Studies on bacteriophage. II ........................................... 237

Quahaug, A quickly prepared medium including accessory growth factors
from fish roe or. A basal medium for the primary isolation of pathogens. 323

R pneumococci, Dissociants of, and their relation to *Streptococcus viridans.*
Pneumococcus variants. II ...................................................... 69
Rabinowitz, Genia. Studies on bacteriophage. I. Relation of bacteriophages
and other lytic agents to negative stool cultures. Study of
two cases ................................................................. 221
— Studies on bacteriophage. II. Comparison of action of lytic agents
and bacteriophages upon pyocyanes cultures .................................. 237
INDEX

Rahn, Otto. The disagreement in mitogenetic experiments, a problem in bacterial physiology ................................................................. 153
— and Hegarty, C. P. Growth retardation by freshly distilled water. .... 21
Relation, The, of microorganisms to carotenoids and Vitamin A. I. The occurrence of carotene in bacteria ........................................ 31
Retiger, Leo F. and Flynn, Catherine S. Variation and filtrability studies on B. mesentericus and B. vulgaris ........................................... 1
— and Weiss, James E. Lactobacillus bifidus .................................. 301
Richards-Jahn photoelectric nephelometer, A note on the ............... 107
Richards, Oscar W. The effect of deuterium on the growth of yeast .... 289
Riker, A. J., Baldwin, I. L., and Sagen, H. E. Studies on certain physiological characters of Phytomonas tumefaciens, Phytomonas rhizogenes, and Bacillus radiobacter ........................................... 571

Seastone, C. V. Capsules in young cultures of Streptococcus hemolyticus ... 481
Shaw, Myrtle and Sickles, Grace M. A systematic study of microorganisms which decompose the specific carbohydrates of the pneumococcus ... 415
Sickles, Grace M. and Shaw, Myrtle. A systematic study of microorganisms which decompose the specific carbohydrates of the pneumococcus ... 415
Skinner, C. E. The synthesis of aromatic amino acids from inorganic nitrogen by molds and the value of mold proteins in diets ............... 95
Smith, Dorothea E. and Joffe, Eleanor W. Variations in the electrophoretic mobilities of the Brucella groups ....................................... 127
Smyth, Henry F., Jr. Evaluation of some factors influencing the phenol resistance of Staphylococcus aureus ..................................... 333
Snyder, Marshall L. and Hall, Ivan C. Isolation of an obligately anaerobic bacillus from the feces of newborn infants and from other human sources, and its probable identity with the "Köpchenbakterien" of Escherich, Rodella's "Bacillus III," and Bacillus paraputrificus (Bienstock) .... 181
Soils and manures, Description of strains isolated from. An investigation of the Bacillus Pasteurii group. I ....................................... 295
Some physiological characteristics of the propionic-acid bacteria ........ 473
Some practical and theoretical aspects of mold metabolism ............. 145
Spoilage of olives by colon bacilli .................................................. 249
Staphylococci, Coagulase and hemolysin tests as measures of the pathogenicity of .......................................................... 343
Staphylococcus aureus, Evaluation of some factors influencing the phenol resistance of ................................................................. 333
Starkey, Robert L. Cultivation of organisms concerned in the oxidation of thiosulfate ................................................................. 365
— The production of polythionates from thiosulfate by microorganisms ... 387
Stool cultures, Negative, Relation of bacteriophage and other lytic agents to. Study of two cases. Studies on bacteriophage. I ......................... 221
Streptococcus viridans, Dissociants of R pneumococci and their relation to. Pneumococcus variants. II ............................................. 69
— hemolyticus, Capsules in young cultures of .................................. 481
Studies on anaerobic bacteria. I. A corn-liver medium for the detection and dilution counts of various anaerobes .................................. 267
INDEX

649

Studies on bacteriophage. I. Relation of bacteriophage and other lytic agents to negative stool cultures. Study of two cases. 221
— on bacteriophage. II. Comparison of action of lytic agents and bacteriophages upon pyocyanus cultures. 237
— on certain physiological characters of Phytomonas tumefaciens, Phytomonas rhizogenes, and Bacillus radiobacter. Part I. 571
— on certain physiological characters of Phytomonas tumefaciens, Phytomonas rhizogenes and Bacillus radiobacter. Part II. 597
Sugar fermentation, Present status of the problem of. 461
Synthesis, The, of aromatic amino acids from inorganic nitrogen by molds and the value of mold proteins in diets. 95
Synthetic media, Bacterial variation with special reference to behavior of some mutable strains of colon bacteria in. 619
Systematic, A, study of microorganisms which decompose the specific carbohydrates of the pneumococcus. 415

Thiosulfate, Cultivation of organisms concerned in the oxidation of. 365
—, The production of polythionates from, by microorganisms. 387
Thompson, Redvers. A mechanical device which prepares and inoculates rolled tubes. 279
— An organism with a transverse capsule. 41
Tracy, Ralph L. Spoilage of olives by colon bacilli. 249

Variants, Pneumococcus. I. Intermediate forms and the influence of environment in their production during in-vitro S to R and R to S transitions. 45
—, Pneumococcus. II. Dissociants of R pneumococci and their relation to Streptococcus viridans. 69
Variation and filtrability studies on B. mesentericus and B. vulgatus. 1
Variations in the electrophoretic mobilities of the Bacillus groups. 127
Virtanen, Artturi I. On the enzymes of bacteria and bacterial metabolism. 447
Vitamin A, The relation of microorganisms to carotenoids and. I. The occurrence of carotene in bacteria. 31

Waksman, Selman A., Carey, Cornelia L. and Allen, Melvin C. Bacteria decomposing alginic acid. 213
Water, Growth retardation by freshly distilled. 21
Weiss, James E. and Rettger, Leo F. Lactobacillus bifidus. 501
Welch, Henry and Poole, Allan K. The pleo-antigenicity of a variant of Proteus X19. 523
—, William Henry. 1850–1934. 453

Yeast, The effect of deuterium on the growth of. 289
Yellow fever virus, A partial purification of, through adsorption and elution. 401
ZoBell, Claude E. and Feltham, Catherine B. A comparison of lead, bismuth and iron as detectors of hydrogen sulphide produced by bacteria. 169