

INDEX TO VOLUME IV, 1876.

V

|   |       |       |   |                |
|---|-------|-------|---|----------------|
| Collar folding, R. Jellyman et al .....                     | 5744  | 5748  | Dyeing, skins, J. and C. Smith.....                         | 6470           |
| Compass, W. Asough .....                                    | 6207  | 6207  | Ear muffler, H. G. Creveling .....                          | 6513           |
| " mariner, S. Bent.....                                     | 6474  | 6474  | Earth auger, I. Ireland .....                               | 6320           |
| Condensers, ejector, J. F. Guthrie.....                     | 6096  | 6096  | Egg beater, J. Howes .....                                  | 5552           |
| Cooking cattle feed, J. Carroll .....                       | 6544  | 6544  | Ejector condensers, J. F. Guthrie .....                     | 6096           |
| " lamp, J. W. Cole.....                                     | 5832  | 5832  | Ejectors and injectors, G. H. Little .....                  | 5041           |
| " range, T. Crevier.....                                    | 6713  | 6713  | Electric appliances, J. E. Hoherington 6180 6181 6189 ..... | 6216           |
| " storm, H. E. Fuller.....                                  | 6731  | 6731  | " battery, J. E. Watson.....                                | 6721           |
| " stove, E. Bartlett.....                                   | 6203  | 6203  | " telegraph, R. K. Boyle .....                              | 5493           |
| " " T. R. Timby et al .....                                 | 5890  | 5890  | Elevating on vessels, G. Mikom .....                        | 6598           |
| " vessel, W. Y. Thomson .....                               | 6511  | 6511  | Elevator, D. S. Bailey.....                                 | 6367           |
| Coolers, air, J. H. Bellinger, Jr.....                      | 6082  | 6082  | " hydraulic, T. S. Webb .....                               | 6708           |
| " liquid, F. W. Cattell .....                               | 6730  | 6730  | " rock, J. McBatchelor et al .....                          | 5921           |
| Copper, H. Chadwick et al.....                              | 6129  | 6129  | " water, D. Conrad .....                                    | 6549           |
| " ores, T. H. Cressley et al .....                          | 6152  | 6152  | Engine, G. Weiss.....                                       | 6067           |
| " sulphate, J. H. Dennis .....                              | 5944  | 5944  | " M. W. Shapley .....                                       | 6120           |
| Cards, manufacture of, L. Binns .....                       | 5873  | 5873  | " W. Carey et al .....                                      | 5914           |
| Corking apparatus, H. B. Dyer .....                         | 5705  | 5705  | " electro-magnetic, C. A. Hussey .....                      | 5097           |
| Corn sheller, C. D. Read et al.....                         | 6519  | 6519  | " gas, N. A. Otto .....                                     | 6479           |
| Corse, E. A. Waterhouse .....                               | 6721  | 6721  | " porous, J. Abel .....                                     | 6580           |
| " C. P. Clark .....   | 6153  | 6153  | " rotary, W. Haven .....                                    | 0032           |
| " F. Crompton .....   | 6676  | 6676  | Envelope, J. Collins .....                                  | 0527           |
| " and supporter, C. C. Robertson .....                      | 5714  | 5714  | Evaporators, sap, J. P. Baldwin .....                       | 6272           |
| Cosmetie, F. J. Cleaver .....                               | 6033  | 6033  | Eve cup, P. J. Stevens .....                                | 6297           |
| Cotton, separating wool from, L. R. & C. F. Broadbent ..... | 6049  | 6049  | Fabrics, draped, L. W. Whipple .....                        | 6375           |
| Cooking machine, D. M. Holmes .....                         | 6163  | 6163  | " textile, S. Van Beekhoven .....                           | 6121           |
| Cradle, Grain, C. P. Kellogg et al .....                    | 6117  | 6117  | Fanning mill, A. W. Kenarick .....                          | 0638           |
| Cradles, rocking, C. Barlow .....                           | 5770  | 5770  | " " C. Ethier .....   | 6108           |
| Crape restoring, A. J. Shiriver .....                       | 6511  | 6511  | " " H. Munro .....  | 0577           |
| Crimping, C. Besupré .....                                  | 6319  | 6319  | " " L. Theobald .....                                       | 5423           |
| Cultivator, G. Gillies .....                                | 5970  | 5970  | " " R. Leon et al .....                                     | 5538           |
| " J. Richardson .....                                       | 6593  | 6593  | " " W. D. and J. N. Ely .....                               | 5556           |
| " J. Wade .....   | 6228  | 6228  | Face register, C. A. Snow .....                             | 5482           |
| " R. Sylvester .....  | 5100  | 5100  | " " G. Bowles .....   | 6509           |
| " R. W. Magee .....   | 6500  | 6500  | " " H. T. Davis .....                                       | 6175           |
| " W. Green .....  | 6109  | 6109  | " " W. H. Hornum .....                                      | 6298           |
| " J. Y. Hammond .....                                       | 6325  | 6325  | Fasteners, door, C. Kinney .....                            | 0071           |
| Cord cutting, J. P. Bellinger .....                         | 6532  | 6532  | Fastening glove, F. G. Farnham .....                        | 0084           |
| Curtain fixtures, W. E. Skinner et al .....                 | 6238  | 6238  | Faucets, J. Collins et al .....                             | 6350           |
| " stretching, J. A. Green .....                             | 5906  | 5906  | Feather duster, L. A. S. O. I. .....                        | 5482           |
| Cutters, blue, E. S. Cook et al .....                       | 5748  | 5748  | " renovator, A. Monroe .....                                | 6778           |
| " root, N. and T. Anbot .....                               | 6105  | 6105  | " " N. P. Choyey .....                                      | 6603           |
| Cutting bolt nippers, W. E. Lord .....                      | 6494  | 6494  | Fences, A. F. Allan .....                                   | 5778           |
| " irregular figure, H. McAdam .....                         | 6024  | 6024  | " E. Sims et al .....                                       | 0492           |
| Damper, S. F. Gold .....                                    | 6025  | 6025  | " J. Bagshaw .....  | 6385           |
| Dental apparatus, E. P. Brown et al .....                   | 5938  | 5938  | " J. Kinney .....   | 6390           |
| Deck, W. S. Woolon .....                                    | 6343  | 6343  | " M. Burttess .....   | 6332           |
| " school, F. C. Charterland .....                           | 5708  | 5708  | Fertilizer, H. O. P. Lissneray .....                        | 5849 6722 6749 |
| Dish drainer, V. Conquer .....                              | 6309  | 6309  | Filter, J. F. Crease .....                                  | 5818           |
| Distilling apparatus, W. Watt .....                         | 5420  | 5420  | Filting medium, G. B. Stock et al .....                     | 0159           |
| Dogs, locking, O. H. Smith .....                            | 6127  | 6127  | Fire arm, J. Lee .....                                      | 5844           |
| Door storms, W. Tanner .....                                | 6084  | 6084  | " W. P. Marton .....  | 6281           |
| " and glass, A. D. Cable et al .....                        | 5456  | 5456  | " bar and bearer, G. Haworth .....                          | 6349           |
| " bolt, J. P. Killingbury .....                             | 6435  | 6435  | " joint for, "  | 6497           |
| " chuck, S. R. Billings .....                               | 6234  | 6234  | " escape, D. Sandford .....                                 | 5631           |
| " fastener, C. J. Ferguson .....                            | 6650  | 6650  | " T. Jingras .....  | 5700           |
| " " C. K. May .....   | 6071  | 6071  | " extinguisher, A. M. Murphy .....                          | 5907           |
| " fastening, bars, P. A. Poor .....                         | 6357  | 6357  | " " J. H. Connally .....                                    | 5505           |
| " hanger, L. A. Cook .....                                  | 5971  | 5971  | " " W. Dickson, Jr. ....                                    | 5408           |
| " " S. H. and E. Y. Moore .....                             | 6295  | 6295  | " in petroleum tanks, J. H. Connally .....                  | 5861           |
| " holder, H. McAdam .....                                   | 6219  | 6219  | " life preserver, J. Rich et al .....                       | 6540           |
| " knob, C. Carpenter .....                                  | 557-5 | 557-5 | " lighting, L. J. Hill .....                                | 6302           |
| " " W. H. Gonine .....                                      | 6242  | 6242  | " places, A. A. Putz .....                                  | 0105           |
| " strip, W. P. Widdifield .....                             | 5716  | 5716  | " fish extract, S. L. Goodale .....                         | 5761           |
| " mats, O. Rice .....                                       | 6080  | 6080  | "atching, S. Wilmot .....                                   | 6054           |
| " roller, S. H. and E. Y. Moore .....                       | 6725  | 6725  | " packing, E. Piper .....                                   | 5827           |
| " spring, C. T. Sabin .....                                 | 6569  | 6569  | " preparation of, C. W. Gantler .....                       | 6682           |
| Doors or shutters, S. J. Sanford .....                      | 6431  | 6431  | Fishing, &c., netting for, B. Arnold .....                  | 5940 5941      |
| Drill, by rule, W. H. Newton .....                          | 5497  | 5497  | Floors, S. P. Grocock .....                                 | 0251           |
| Dredging machine, D. Moore .....                            | 6084  | 6084  | Flour bolt, E. Slagle et al .....                           | 0446           |
| Drill chuck, G. M. Pratt .....                              | 6734  | 6734  | Fog alarm, G. Swearnor et al .....                          | 6488           |
| " seed, W. S. Wiser .....                                   | 6510  | 6510  | " L. Smith et al .....                                      | 6492           |
| Dripping apparatus, E. E. Gilbert .....                     | 6595  | 6595  | Food, composition for, J. L. Johnston .....                 | 0104           |
| Drills, M. C. Bulkley .....                                 | 6270  | 6270  | Foot power, W. F. and J. Barnes .....                       | 6908           |
| " remote broken, J. W. Platt .....                          | 5956  | 5956  | Fork line, E. C. Jones et al .....                          | 6481           |
| Drum heater, S. H. Ghent .....                              | 5455  | 5455  | Freezing apparatus, C. W. Gauthier .....                    | 6292           |
| Dry, J. L. Adams et al .....                                | 6316  | 6316  | " " J. C. Ayer .....  | 6596           |
| " c other, N. P. Dion .....                                 | 6136  | 6136  | " meat, &c., D. Y. Howell et al .....                       | 5505           |
| " fruit, A. J. Reynolds .....                               | 6436  | 6436  | Fruit augers, W. McCormick .....                            | 6492           |
| " paint, O. Rossall .....                                   | 6128  | 6128  | " gatherer, H. Varner .....                                 | 5692           |
| Drying tobacco, &c., J. Scates .....                        | 5801  | 5801  | " honey, L. Hurd .....                                      | 5537           |
| Dumping box, G. Seger .....                                 | 6391  | 6391  | " loosener, J. V. Hiddelson .....                           | 5981           |
| " " J. W. Hunt et al .....                                  | 6363  | 6363  |   |                |
| Dusters, J. L. Little .....                                 | 5586  | 5586  |   |                |
| " feather, L. A. Stoll .....                                | 5482  | 5482  |   |                |
| " furniture, L. Hobolt .....                                | 5948  | 5948  |   |                |
| Dyeing, mordant for, F. J. Bird .....                       | 6224  | 6224  |   |                |