

- "Kinetoscope," 155
 Knowles, Hazard, invents hinged cutting-bar for mower, 121
- Lana, Francisco, airship, 227
 Lane, John, plough, 113
 Lane, John, son of first, patents steel plough, 113-14
 Langley, S. P., invents airplane, 229-35
 Langmuir, wireless telegraphy, 146
 Lanston, Tolbert, invents monotype, 149
 Larcom, Lucy, *An Idyl of Work*, 93
 Lathe, Copying, Blanchard invents, 186
 Lathrop, John, Franklin's letter to, 22
 Lawrence, Abbott, and Lowell mills, 93
 Lawrence, Amos, and Lowell mills, 93
 Leonardo da Vinci, artist and inventor, 61; on subject of flight, 226
 Liberty Motors, 242
 Lightning rod, 195
 Lilienthal, Otto, invents glider, 236
 Linotype, 149
 Livingston, R. R., American Minister to France, 64; and Fulton, 64-65; *Clermont* named for estate of, 65-66; Stevens requests influence for railway, 75; statement of objection to railways, 76
 Locomotives, birth of modern, 79; development of, 80-82; *see also* Railroads, Steam engines
 Looms, 36; *see also* Textile industry
 Lowell, F. C., establishes weaving mills, 89, 90; death (1817), 90
- Lowell (Massachusetts), founded, 91-93; Dickens describes, 94-96; changes in, 96-97; bibliography, 250
Lowell Offering, The, 94, 95-96
 Lumière, invents projector for motion pictures, 155
- McCormick, C. H., patents reaper, 116; sale of machines, 117; moves West, 118; business capacity, 118; improvements in reaper, 119
 McKay, Gordon, sole-sewing machine, 108
 McKinley, William, interest in Langley's airplane, 233
 Machine shop, pioneers of, 175 *et seq.*
 Machine tools, *see* Machine shop
 Macintosh, Charles, invents waterproof cloth, 163
 Maine, population (1790), 23
 Manly, C. M., assists Langley, 233-34
 Manning, William, invents reaper, 116, 117
 Marconi, Guglielmo, wireless telegraph, 146
 Menlo Park (New Jersey), Edison's laboratories at, 210; experimental electric railway at, 214
Mercury, rival of *Pennsylvania Gazette*, 6
 Mergenthaler, Ottmar, invents linotype, 149
 Merrimac Manufacturing Company, 91
 Miller, Lewis, mowing machine, 122
 Miller, Phineas, and Whitney, 38, 41, 43, 44, 45, 46; death, 47
 Mohawk and Hudson Railroad, 80
 Monitor, ironclad boat, 179