Manufactures, in 1865, 5-7; effect of Civil War on, 16-17; in early 20th century, 171 Marsh, C. W., invents improvement to reaper, 154, 158 Mercer, J. P., City Treasurer in Philadelphia, 127 Mesaba iron ore range, 57 Metropolitan Street Railway Company, 139 ct seq. Metropolitan Traction Company, 139, 141 (note) Minnesota, iron fields of, 63-65 Monopolies, see Industrial combinations Morgan, J. P., 81, 84, 168 Morris and Company, 170 Municipal government, see City government

National Packing Company, 170 National Tube Company, 81, 82 New York Central Railroad, under Vanderbilt, 23-24; rebates granted by, 45-48 New York City, telephones in,

88-89; street railways, 119; street railway corruption, 135-147

Northcliffe, Lord, telephone demonstration, 86

Oil, first "oil gusher," 4; "Oil Creek," 26-27; used as medicine, 27-28; Bissell's project, 28-29; Silliman's report, 28; "Drake's folly," 29; rush to oil-fields, 30; commercial importance, 31; in Middle West and West, 56; see also Standard Oil Company Osborne, D. M., manufactures

soorne, D. M., manufactures

Page, Dr. C. C., article on theory of sound, 96 Pennsylvania, oil in, 26 et seq. Pennsylvania Railroad, rebates granted by, 44-46; monopoly in and out of Pittsburgh, 83
Perkins, G. W., 81, 168
Petroleum, see Oil
Philadelphia, tclcphones in, 89; public utilities, 121 et seq.
Phipps, Henry, associate of Carnegie, 59, 66, 69-70; receipts in 1900, 80
Pittsburgh as steel center, 74-75
Public utilities, 119 et seq.
Public Utility Commissions, 148
Pupin, M. I., invents "Pupin coil," 93, 103-05
Pure Oil Company, 55, 56

Railroads, of Civil War days, 2; combinations, 9, 23-24; see also Vanderbilt

Rebates, to Standard Oil Company, 43-44, 48; to South Improvement Company, 45-46; to Carnegie, 76

Reis, Philip, telephone experiments by, 96

Rockefeller, J. D., 31 et seq. Rogers, H. H., associate of Rockefeller, 42

Rural free delivery, 90 Ryan, T. F., effects combinations of public utilities, 121; in Tammany Hall, 123; buys Chicago railway system, 126; life and character, 132-34; connection with New York street railways,

137, 138

Salt manufacture, 27-28
Sanders, Thomas, patron of Bell,
94, 95; refuses at first to
finance telephone. 97; withdraws from telephone company, 118

Schwab, C. M., 80; associate of Carnegie, 59, 66; personal characteristics, 70-71; reorganizes Homestead Works, 72-73; made President of Carnegie Company, 73; to be manager