

- 384; torpedo experiments, 391;
final illness, death, 392
Tilghman, Richard A., brother
and associate of Benjamin C.
Tilghman, 371
Timby, Theodore R., revolving
turret, 254
Tire, pneumatic, invented by R.
W. Thomson, 205; recent
forms, 207
Tombstones inscribed by sand
blast, 383
Tompkins, D. A., citations from
his "Cotton," 83, 86, 89
Touch systems in typewriting,
336
Tredgold, Thomas, suggests
T-rail, 21
Typesetting, its details, 393
Typewriter, Sholes', 323, 325;
three plans only, 332; its ele-
ments, 332; recent models,
333; tabulator, rivalry with
printing, principles of con-
struction, 334; manipulation,
335; touch-systems, 336
- U
- Upsala, Silvered Book, 316
- V
- Vail, Alfred, sees Morse's first
model, 147; becomes partner
with Morse, 148; improves
Morse instruments, 151; arti-
cle by F. L. Pope, 152; be-
comes assistant superintendent
of first line, 159; lays under-
ground conduits which fail,
suspends wires in air with
success, 159; instruction by
Morse, 163; improves relay
and finger-key, 164; why he
kept in the background, 165;
portrait, 158
Vapor cure for rubber, 184
Virginia wheat crop, 276
- W
- Wagner, Charles R., on Ottmar
Mergenthaler, 415
War, gifts to peace, 96
Watson, Jessie, prints circles
with acorn cup, 315
Webster, Daniel, argues against
Fulton, 17; portraits and
busts, 104; procures an ex-
tension of Thomas Blanchard's
patent, 105; argues on behalf
Charles Goodyear, 213
Wedge, double, justifier, Schuck-
ers', 429, 430
West, Benjamin, criticises
Morse's pictures, 124; friend-
ship of King George Third,
126
Western Union Telegraph Co.,
recent advances, 172
Wheel, beginnings of, 105
Wheeler, Nathaniel, partner of
Allen B. Wilson, 365
Whitney, Eli, birth, memorial
tablet, manual skill in boy-
hood, 75; teaches school, stud-
ies at Yale, 76; repairs ap-
paratus, goes to Savannah,
guest of Mrs. Nathanael
Greene, 77; begins model of
cotton gin, 78; takes Phineas
Miiler as partner, 81; gin pat-
ented, gin toll excessive, 82;
saws omitted in Whitney's
patent, consequent trouble, 83;
spurious copy of patent, 84; re-
plies to Governor Jackson, 86;
sells patent rights to South
Carolina, 89; to North Caro-
lina, 90; remonstrance against
brutality and dishonesty in
South Carolina, 91; claim as
inventor upheld after investi-
gation, 92; note to Fulton, 93;
begins manufacture of fire-
arms, 96; contracts to supply
10,000 stands of arms, 98; fac-
tory near New Haven, meth-
ods of manufacture, 99;
adopted at Government Ar-
mories, and by foreign nations,
100; marriage, mortal illness,