Designation: F 592 – 84 (Reapproved 1995)

Standard Terminology of Collated and Cohered Fasteners and Their Application Tools[1]

This standard is issued under the fixed designation F 592; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

The terms included in these definitions are listed in alphabetical order to facilitate quick reference. They are intended to apply to collated and cohered nails, staples, and pins driven by strike, pneumatic, electric, manual, and spring tools. Omitted from consideration are terms relating to the testing and the performance of fasteners, that is, their drivability, withdrawal resistance, pull-through resistance, lateral load transmission, creep, protrusion resistance, splitting, and methods of use, such as face, toe, side, and end-nailing, spacing, loading conditions, etc. Reference is made to ASTM Terminology F 547, Terminology of Nails for Use with Wood and Wood-Base Materials,[2] for terms that are applicable to related fasteners that may or may not be collated or cohered.

Common acceptance and usage are the basis for most of the definitions listed. In some instances, this common usage results in more than one definition for a given term. In other cases, registered trademarks have become generic in nature; hence, are included among the terms listed.

Any such listing cannot be complete. As additional terms are referred to the Society's attention, they will be considered for inclusion in this standard.

This listing of definitions of terms is in agreement so far as feasible with and supplementary to Terminology F 547.

The definitions are listed under the following headings:

Collated and Cohered Fasteners
Tools for Driving Collated and Cohered Fasteners

COLLATED AND COHERED FASTENERS

bevel point—point sheared obliquely to staple-leg axis, with beveled face across staple-leg end; used to produce an outward clinch or to provide additional penetration, or both, in thin stapling member (see Fig. 1(*A*)).

blind clinch—clinch between the layers of corrugated boards, usually buried with wide-crown retractable anvil tools.

bookbinder's wire—wire used in stitchers to fasten paper; measured according to AWG sizes.

box stay wire—wire used in stitchers for assembly of containers; with dimensions measured in thousandths of inches.

breakaway staple—staple with its crown designed to break off if removal is attempted; used to discourage pilfering and shop-lifting.

by-pass clinch—clinch with legs paralleling and adjacent to each other.

calendar staple—staple formed to provide a hanger for use with calendars or booklets.

chisel point—point with two symmetrically beveled planes forming "V" at end of staple leg, resulting in straight penetration (see Fig. 1(*B*)). (See **cross-cut chisel point.**)

clinch—protruding point end turned over or flattened when driven or driven against clinching plate.

clinch point—point designed to facilitate clinching when driven against clinching plate. (See **step point.**)

clip—See **strip.**

clipped head—misnomer for D head. (See **notched head.)**

coated fastener—a fastener with appropriate material applied to its surface to increase the fastener-withdrawal resistance.

cohered—assembled in strip, coil, or other predetermined form as defined in Terminology F 547.

coiled—assembled in coil form.

collated—assembled in strip or other predetermined form.

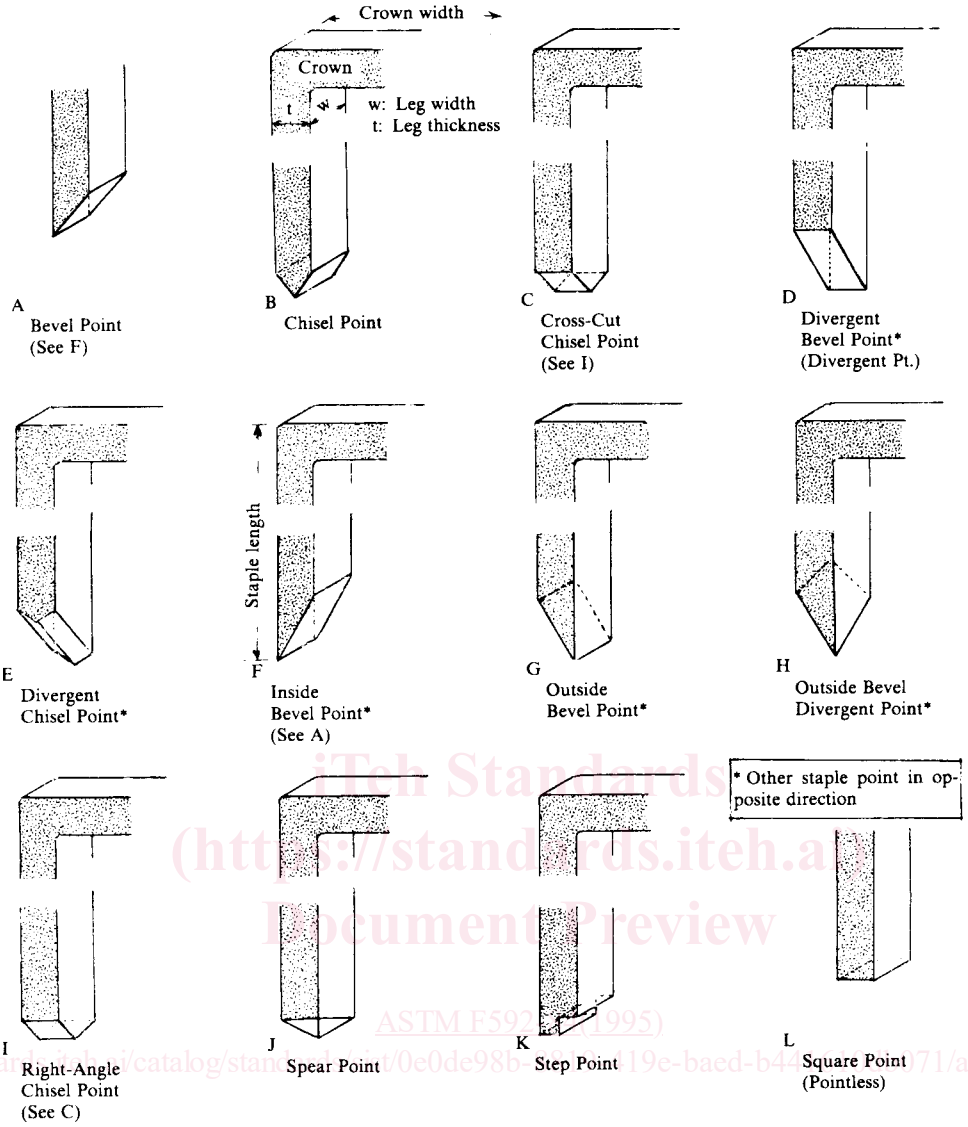
cross-cut chisel point—chisel point with beveled point faces parallel to staple-crown axis (see Fig. 1(*C*)). (See **right-angle chisel point.**)

crown—staple end opposite staple point, connecting both

[1] These definitions are under the jurisdiction of ASTM Committee F-16 on Fasteners and are the direct responsibility of Subcommittee F16.05 on Driven and Other Fasteners.

Current edition approved Aug. 31, 1984. Published October 1984. Originally published as F 592 – 78. Last previous edition F 592 – 80.

[2] *Annual Book of ASTM Standards*, Vol 01.08.



NOTE—Staple chisel point has two faces, forming rectangular cross section; whereas nail chisel point (except collated T-nail chisel point and collated round-head nail chisel point) has six faces, forming hexagonal cross section, that is, two major planes forming a "V" and pair of minor planes on each flank (see ASTM Definitions F 547).

FIG. 1 Various Types of Staple Points

staple legs and providing bearing area.

crown width—overall width of staple including both staple legs.

D head—nail head with semi-circular rim and head segment omitted during heading, with omitted segment reaching from rim to shank projection, to allow tight collating of nails in strip form.

divergent point—See **divergent bevel point.**

divergent bevel point—points sheared obliquely to staple-leg axis, with beveled face in opposite direction on each leg, across thick leg side leading from lower to upper thick face; designed to lead staple legs into opposite directions perpendicular to staple plane during driving (see Fig. 1(*D*)).

divergent chisel point—chisel point with beveled point faces at angle to staple crown in plane perpendicular to staple crown axis; designed to lead staple legs into opposite directions perpendicular to staple plane during driving (see Fig. 1(*E*)).

flat clinch—clinch formed by folding staple legs parallel to crown with movable clincher.

flared—staple legs spread into outward opposite directions 90° with crown plane.

flat crown—straight staple crown in contrast to rounded, formed, or offset staple crown.

formed crown—staple crown formed during driving, for example, for carding or fastening wire.

high crown—staple crown with inverted "V" wire cross-section prior to staple driving; designed to provide rigidity during driving and flattened when fully driven. (see **"V" Crown.**)

hog ring, hog-ring staple—open-ended, rounded, ring, or