CLAIMS

What is claimed is:

1. A toothbrush comprising:

a handle;

a head connected to an end of the handle, the head having an upper surface; and

a plurality of bristles mounted on the head so the bristles extend from the upper surface on only one side of the head,

wherein the plurality of bristles are arranged in a plurality of sets comprising first, second, and third sets, the bristles of each of the first, second, and third sets being substantially parallel to other bristles in the same respective set, the bristles of each of the first, second, and third sets being defined by a longitudinal row of bristles, the bristles of the second set being defined by a plurality of laterally spaced apart longitudinal rows of bristles, the bristles in the first and third sets being oriented to angle outwardly from the bristles in the second set as they extend away from the upper surface;

the toothbrush further comprising openings in the upper surface and wherein the plurality of bristles each have a base that extends through one of the openings in the upper surface and a distal end spaced from the upper surface, wherein the bristles are arranged so that a distance between the bases of the bristles in the first set and the adjacent bases of the bristles in the second set is less than a distance between the distal ends of the bristles in the first set and the distal ends of the bristles in the second set, and so that a distance between the bases of the bristles in the third set and the adjacent bases of the bristles in the second set is less than a distance between the distal ends of the bristles in the third set and the distal ends of the bristles in the second set.

2. A toothbrush as set forth in claim 1 wherein the openings in the upper surface for the bristles in the first, second, and third sets are arranged in an array configured so the openings are arranged in rows extending generally transverse to the handle and columns extending generally parallel to the handle, and wherein the openings in each row are spaced from one another at substantially uniform intervals and include openings that contain bristles in the first, second, and third sets.

3. A toothbrush as set forth in claim 2 wherein the openings in each column are spaced from one another at substantially uniform intervals and the openings in each column contain bristles from only a single one of said first, second, and third sets.

4. A toothbrush as set forth in any one of claims 2 and 3 wherein the bristles in the first, second, and third sets are arranged in tufts comprised of multiple bristles, the bristles of each tuft extending through a single one of the openings in the upper surface.

5. A toothbrush as set forth in any one of claims 2-4 wherein said plurality of sets of bristles further comprises a fourth set, the fourth set being positioned so the first, second, and third sets are located between the fourth set and the handle and wherein the plurality of bristles in said fourth set are arranged in an arcuate configuration.

6. A toothbrush as set forth in claim 5 wherein the bristles in said fourth set include a band of bristles extending in an arcuate configuration extending from an end of the first set to and end of the third set.

7. A toothbrush as set forth in claim 6 wherein the bristles in said fourth set further comprise a group of bristles

spaced inward from said band and located adjacent an end of the second set of bristles.

8. A toothbrush as set forth in claim 7 wherein said band is an outer band and said group of bristles spaced inward from the outer band are arranged to form an inner band, wherein the inner and outer bands of bristles are generally concentrically spaced from one another.

9. A toothbrush a set forth in any one of claims 1-8 wherein the bristles in the first and third sets are arranged so they intersect the upper surface at one or more non-orthogonal angles.

10. A toothbrush as set forth in any one of claims 1-9 wherein the bristles in said first, second, and third sets have distal ends positioned to lie on a convex brushing surface.

11. A toothbrush as set forth in any one of claims 1-9 wherein the bristles in said first, second, and third sets have distal ends positioned to lie on a planar brushing surface.

12. A toothbrush as set forth in any one of claims 1-9 wherein the bristles in said first, second, and third sets have distal ends positioned to lie on a concave brushing surface.

13. A toothbrush as set forth in any one of claims 1-12 wherein the head of the toothbrush has an oval cross sectional shape.

14. A toothbrush comprising:

a handle;

a head connected to an end of the handle, the head having an upper surface; and

a plurality of bristles mounted on the head so the bristles extend from the upper surface on only one side of the head,

wherein the plurality of bristles are arranged in a plurality of sets comprising first, second, and third sets, the bristles of each of the first, second, and third sets being defined by a longitudinal row of bristles, the bristles in the first and third sets being oriented to angle outwardly from the bristles in the second set as they extend away from the upper surface, the plurality of sets of bristles further comprising a fourth set being positioned so the first, second, and third sets are located between the fourth set and the handle and wherein the plurality of bristles in said fourth set are arranged in an arcuate configuration, the bristles in said fourth set including a band of bristles extending in an arcuate configuration extending from an end of the first set to and end of the third set.