We claim:

1. A backup ring for a face seal for an earth boring bit, comprising:

a ring shaped member having an inner surface adjacent the face seal and an outer surface that is exposed to drilling fluids and a cross-section having a center;

said outer surface comprising at least one open circumferentially oriented gap defined between contiguous cantilevered segments of said member, said cantilevered segments forming opposing spaced ends of said outer surface to define said gap between said spaced ends of said outer surface, said gap forming a recess defined as a surface that extends toward said center without extending beyond said opposing spaced ends of said outer surface, said cantilevered segments flexibly movable to change the dimension of said recess with movement toward or away from each other.

2. The member of claim **1**, wherein:

said recess has a relaxed shape that is larger than an installed shape when mounted in the bit.

3. The member of claim **1**, wherein:

said recess has a v-shape.

4. The member of claim **1**, wherein:

said recess has a u-shape.

5. The member of claim **1**, wherein:

said recess further comprises a spring.

6. The member of claim **5**, wherein:

said spring conforms to the shape of said recess.

7. The member of claim **6**, wherein:

said spring is externally mounted to said member in said recess.

8. The member of claim **6**, wherein:

said spring is at least in part internally mounted to said member.

9. The member of claim **5**, wherein:

said spring extends substantially over a surface or surfaces that define said recess.

10. The member of claim **1**, wherein:

the hardness of said member is at least 46 durometer on the Shore A scale.

11. The member of claim **5**, wherein:

said spring is made of at least one component.

12. The member of claim **11**, wherein:

said spring comprises spaced apart segments.

13. The member of claim **11**, wherein:

said spring comprises a single component scroll with overlapping ends.

14. The member of claim **11**, wherein:

said spring comprises a coiled spring.

15. A backup ring for a face seal for an earth boring bit, comprising:

a ring shaped member having an inner surface adjacent the face seal and an outer surface that is exposed to drilling fluids, said member having a cross-section having a center;

said outer surface comprising at least one opening to a generally radially extending open elongated void internally of said member that is not filled and oriented in a direction toward said center, said void changing shape under loading of said member making said member resilient in response to said loading.

16. The member of claim **15**, wherein:

said at least one bore comprises a plurality of bores arranged in a predetermined pattern or randomly arranged.

17. The member of claim **16**, wherein:

said bores have a depth that is less than half a height of said member.

18. The member of claim **16**, wherein:

at least some bores have a spring therein.

19. The member of claim **18**, wherein:

said spring comprises a tubular shape with at least one wall opening or comprises a tubularly shaped scroll or comprises a coiled spring.

20. The member of claim **16**, wherein:

said bores comprise a round, quadrilateral or polygonal shape.

21. The member of claim **16**, wherein:

said bores have the same or different shapes.

22. The member of claim **16**, wherein:

the hardness of said member is at least 46 durometer on the Shore A scale.

23. The member of claim **16**, wherein:

at least some of the bores are filled at least in part with a viscous material.