Claims

~~1. A safety anchor comprising: a coiled spring (5); a stud (1) extending substantially centrally within the spring, the stud being formed with a portion (3) of reduced strength; and means (7, 9) for securing ends of the spring to the stud at each side of the portion of reduced strength.~~

~~2. A safety anchor as claimed in claim 1, wherein the portion (3) of reduced strength comprises a portion of reduced cross-section of the stud (1).~~

~~3. A safety anchor as claimed in claim 2, wherein the portion (3) of reduced cross-section comprises a necked portion, apertured portion or cut-away portion of the stud (1).~~

~~4. A safety anchor as claimed in any preceding claim, wherein the spring (5) is in the form of a barrel spring, cylindrical spring or conical spring.~~

~~5.~~1. A safety anchor comprising: a coiled spring; a stud extending substantially centrally within the spring, the stud being formed with a portion of reduced strength; and means for securing ends of the spring to the stud at each side of the portion of reduced strength~~as claimed in any preceding claim~~, wherein the spring ~~(5)~~ is permanently secured to the stud ~~(1)~~.

~~6.~~2. A safety anchor as claimed in claim ~~5~~1, wherein the spring ~~(5)~~ is permanently secured to the stud ~~(1)~~ in the region of each end of the spring by way of an insert ~~(7)~~ which engages with the stud.

~~7.~~3. A safety anchor as claimed in claim ~~6~~2, wherein the inserts ~~(7)~~ each engage behind a shoulder ~~(9)~~ which is formed on the central stud ~~(1)~~ either side of the portion ~~(3)~~ of reduced strength.

~~8.~~4. A safety anchor as claimed in claim ~~6~~ 1 or ~~7~~2, wherein the spring inserts ~~(7)~~ comprise a cup portion ~~(11)~~ having an aperture therethrough so as to form an inwardly extending flange to engage with the shoulder ~~(9)~~.

~~9.~~5. A safety anchor as claimed in claim ~~8~~4, wherein the spring inserts ~~(7)~~ also comprise a frustoconical portion ~~(13)~~ which extends within the coils of the spring ~~(5)~~.

~~10.~~6. A safety anchor as claimed in claim ~~8~~ 4 or ~~9~~5, wherein an outwardly extending flange is provided on each insert ~~(7)~~ at that end of the insert remote from the cup portion ~~(11)~~.

~~11.~~7. A safety anchor as claimed in any one of claims ~~6~~ 2 to ~~10~~6, wherein the two inserts ~~(7)~~ are secured together by a frangible tube which extends around the stud ~~(1)~~.

~~12.~~8. A safety anchor as claimed in any one of claims ~~6~~ 2 to ~~11~~7, wherein the ends of

the spring ~~(5)~~ are provided with caps.

~~13.~~9. A safety anchor as claimed in claim ~~12~~8, wherein the ends of the spring ~~(5)~~ are provided with cup-shaped caps.

~~14. A safety anchor as claimed in one of claims 1 to 4, wherein the spring (5) is removably secured to the stud (1).~~

~~15.~~10. A safety anchor comprising: a coiled spring; a stud extending substantially centrally within the spring, the stud being formed with a portion of reduced strength; and means for securing ends of the spring to the stud at each side of the portion of reduced strength~~as claimed in claim 14~~, wherein the spring ~~(5)~~ is removably secured to the stud ~~(1)~~ by way of a clamp ~~(17)~~ in the region of each end of the spring.

~~16.~~11. A safety anchor as claimed in claim ~~15~~10, wherein the clamps ~~(17)~~ are secured to the central stud ~~(1)~~ on either side of the portion ~~(3)~~ of reduced strength.

~~17.~~12. A safety anchor as claimed in claim ~~15~~-10 or ~~16~~11, wherein the spring ~~(5)~~ is formed with a substantially straight portion ~~(19)~~ at each end thereof to allow the clamp ~~(17)~~ to be securely fastened to the ends of the spring.

~~18.~~13. A safety anchor as claimed in claim ~~15~~10, ~~16~~-11 or ~~17~~12, wherein, where the surfaces of the spring ~~(5)~~ and the clamp ~~(17)~~ interact, the spring and/or the clamp is profiled to increase the security of the fastening between the spring and the clamp.

~~19.~~14. A safety anchor as claimed in any one of claims ~~15~~-10 to ~~18~~13, wherein the clamp ~~(17)~~ is secured to the spring ~~(5)~~ by a securing nut and bolt arrangement ~~(21)~~.

~~20.~~15. A safety anchor as claimed in any one of claims ~~15~~-10 to ~~19~~14, wherein the ends of the spring ~~(5)~~ are provided with a crimped or kinked section ~~(23)~~ to prevent the spring being pulled out of the clamp ~~(17)~~.

~~21. A safety anchor as claimed in any preceding claim, wherein the spring (5) is surrounded by a protective housing (15).~~

~~22. A safety anchor as claimed in any preceding claim, wherein an end of the stud (1) is threaded to provide a securing point for part of a safety system.~~

~~23. A safety anchor as claimed in claim 22 when dependent on claim 21, wherein the stud (1) is threaded where the stud passes through an end of the housing (15).~~

~~24. A safety anchor as claimed in any preceding claim, wherein the safety anchor is mounted on a base plate (25).~~

~~25. A safety anchor as claimed in claim 24, wherein the safety anchor is mounted on the base plate (25) by way of the stud (1).~~

~~26. A safety anchor as claimed in claim 24 or 25, wherein the safety anchor is secured to the base plate (25) by fastening means (27) which allows the safety anchor to be installed and/or removed without requiring access to both sides of the base plate.~~

~~27. A safety anchor as claimed in claim 24, 25 or 26 and including a spacer to space the safety anchor above the level of the base plate (25).~~