

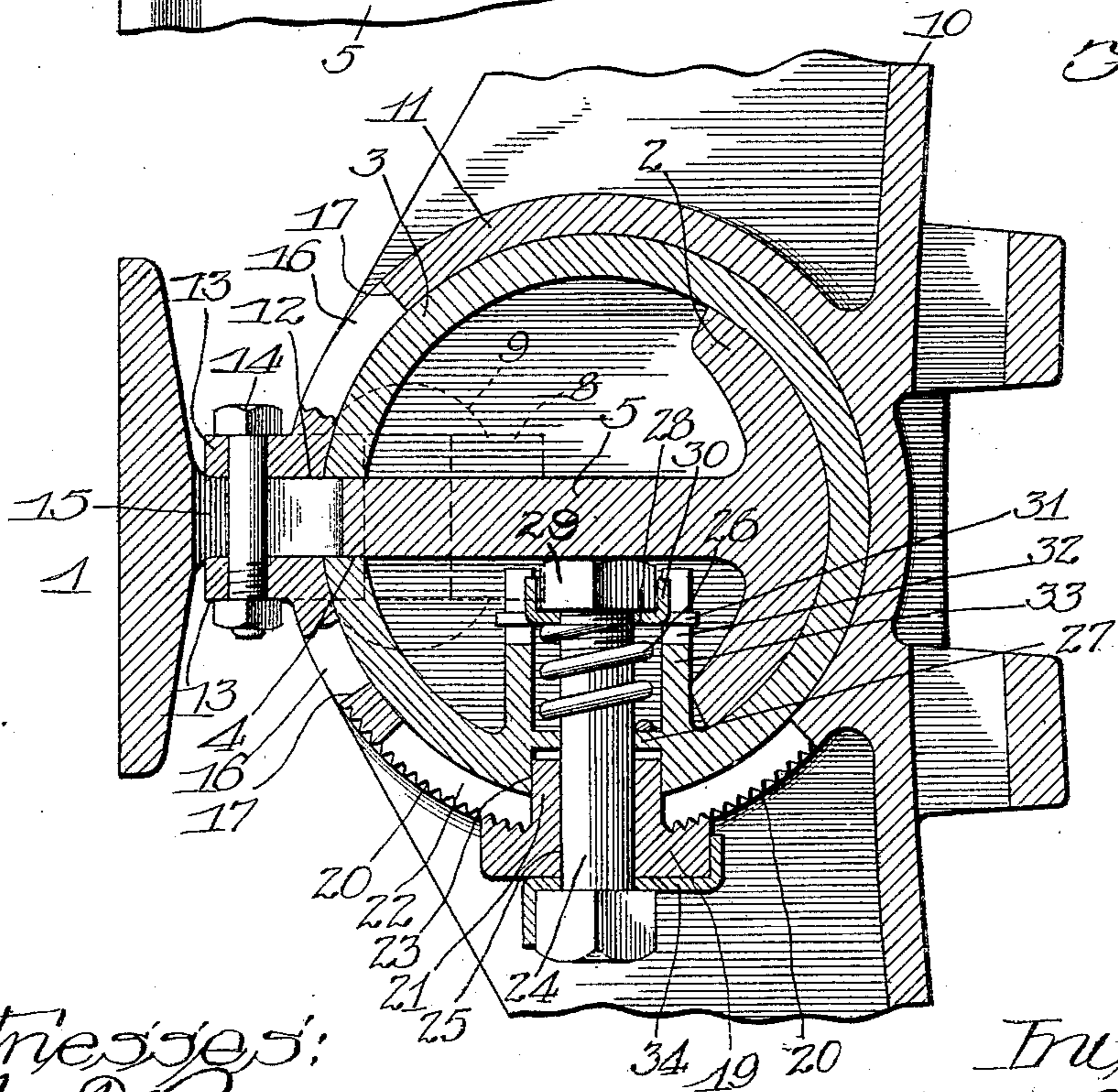
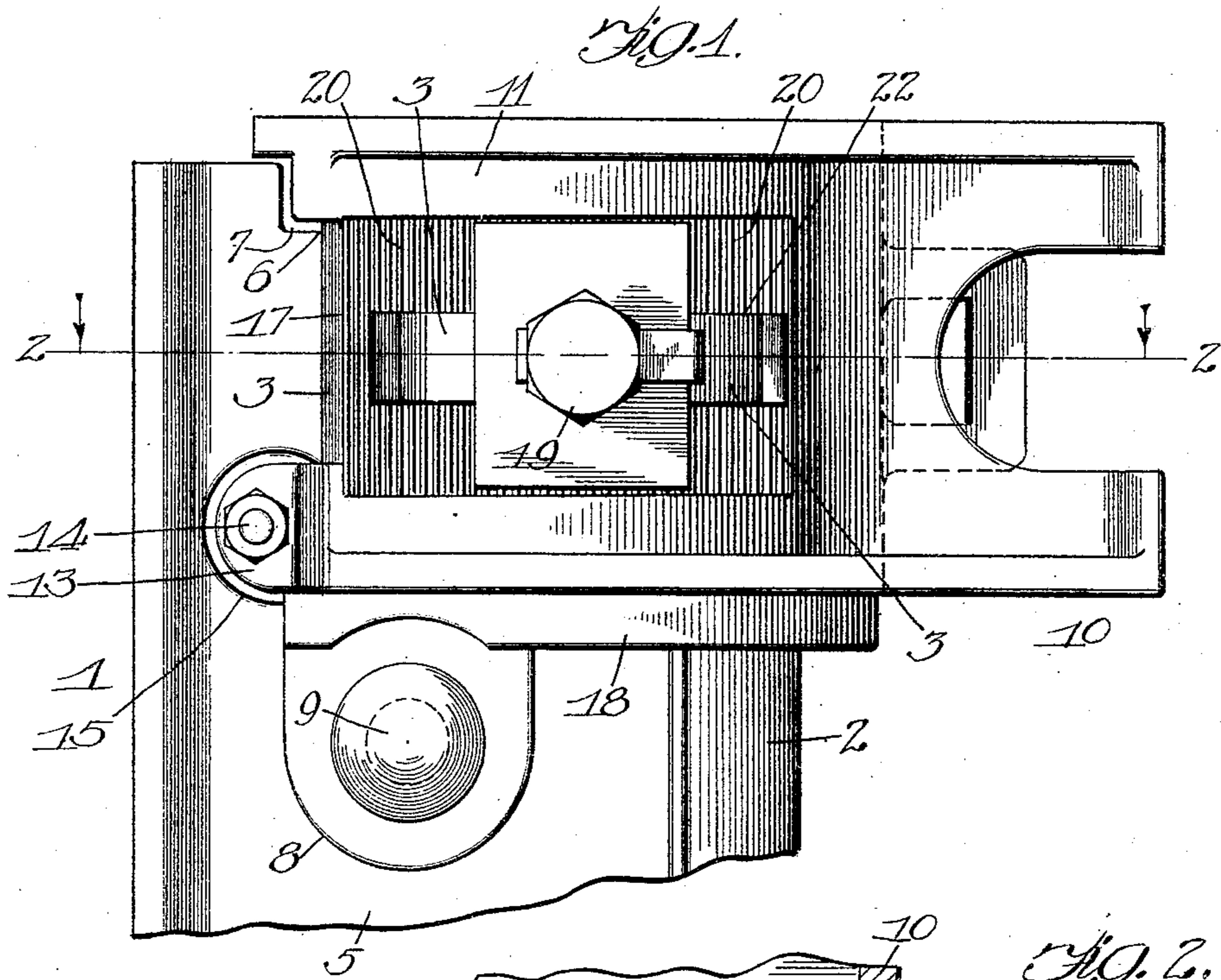
H. ZIEMSS, JR.

BRAKE BEAM.

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940,417.

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HENRY ZIEMSS, JR., OF CHICAGO, ILLINOIS.

BRAKE-BEAM.

940,417.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY ZIEMSS, Jr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Brake-Beams, of which the following is a specification.

One of the objects of this invention is to improve the construction of the brake-head supporting means in brake beams.

Another object is to provide improved means for adjustably securing the brake-head to the beam.

In the accompanying drawings, Figure 1 is a fragmental view of one end of a brake beam embodying the features of my invention, the brake head being illustrated in operative relation to the beam. Fig. 2 is a section substantially on dotted line 2 2 of Fig. 1.

The beam which I have selected for the purpose of illustrating the invention is formed from an I-beam and is indicated by the numeral 1 in the drawings. A portion of one transverse web or head 2 of the beam at each end of the beam is bent to lie within a sleeve 3. Said sleeve is slotted at 4 for the admission of the central web 5 of the beam. The slot 4 does not extend entirely through the sleeve, but stops at the point indicated by 6 in Fig. 1. The beam 1 is notched at 7 to receive the closed end of the slot 4. At the inner end of the sleeve 3 are two ears 8 adapted to lie at opposite sides of and in contact with the central web 5 of the beam, a rivet 9 or equivalent means being passed through said ears and web to secure the sleeve to the beam. The brake head 10, in this embodiment, has a hub 11 which is removably fitted upon the sleeve 3. At the inner end of the brake head, a slot 12 is formed to receive the central web 5 of the beam when the head is being placed upon said beam. On the brake head and at opposite sides of said slot are formed lugs 13 through which a bolt 14 extends. An opening 15 is formed in the central web of the beam of sufficient size to permit the ears 13 and bolt 14 to pass through it when the head is being adjusted in position. The hub 11 is cut away at one side, as at 16, sufficiently to permit of the desired degree of pivotal movement of the brake head. The cut-away portion 16 is in effect a continuation of the slot 12.

As shown in Fig. 1, the cut-away portion

16 does not extend through the outer end of the hub 11 in order not to weaken the brake-head unduly. The brake-head is further strengthened by the bolt 14. The pivotal movements of the brake-head upon the sleeve 3 are limited by the engagement of the edge walls 17 with the central web 5 of the beam. The sleeve 3 has an annular flange 18 upon its inner end against which the brake-head is arranged to lie.

The means for locking the brake-head in position upon the sleeve comprises, in this instance, a block 19 corrugated upon its inner surface to engage corrugations 20 upon the periphery of the hub 11. The block 19 has a stem 21 which extends through an elongated opening 22 in the hub 11 into a recess 23 in the sleeve 3. It will be seen that when the block 19 is in engagement with the corrugated surface 20 the brake-head 10 is held against rotation upon the sleeve 3. The means herein shown for thus holding the block in engagement with the brake-head will next be described.

A bolt 24 extends through an opening 25 in the block 19 and the stem 21, the head of said bolt preferably lying outside of the brake-head. A coiled spring 26 presses at one end against a suitable portion of the sleeve 3, such as the web 27, and at its other end against a washer 28 underneath the nut 29 of the bolt 24. The nut is held against rotation by means of lugs 30 on said washer. The washer in turn is held against rotation by means of lugs 31 thereon which extend into slots 32 formed in the portions 33 of the sleeve 3. The bolt 24 may be held against rotation in any suitable way, as, for example, by means of a lock washer 34.

Assuming the bolt 24 and the block 19 to be removed from the beam structure, the brake-head is placed upon the beam by slipping said head over the sleeve 3. The bolt 14 is then passed through the lugs 13, the block 19 placed in position with its stem in the recess 23, and the bolt 24 passed through said block and engaged with its nut 29.

When the parts are in the position shown in Fig. 2, the brake head is yieldingly or self-adjustably held against rotation upon the sleeve, the block 19 yielding downwardly to permit the corrugated surface 20 to move past it in either direction. If it be desired to lock the brake-head rigidly against movement upon the sleeve 3, the bolt 24 is rotated until the lugs 31 on the washer 30 are drawn

against the lower end walls of the slots 32, thereby preventing movement of the locking block 19. The stem 21 of said locking block serves to prevent displacement of the brake-head longitudinally of the beam.

It is obvious that the means herein shown for adjustably securing the brake-head to the beam may be employed in beams of various constructions, and that modifications of the construction here illustrated will occur to those skilled in the art, wherefore I desire not to be limited to the details of construction shown and described.

I claim as my invention:

15 1. A brake beam comprising a beam having a web, and a sleeve slotted to receive said web and secured to said web.

2. A brake beam comprising a beam having a web, and flanges at one edge of said web, a sleeve slotted at one side to receive said web, said flanges being curved to lie within said sleeve, and means for securing said sleeve to said web.

3. A brake beam comprising an I-beam, a portion of one head of said beam being bent, a sleeve having a slot extending through one side of said sleeve from one end of said sleeve to a point near the other end of said sleeve, said slot receiving the central web of the I-beam, the end of the latter being notched to receive the closed end of the slot, said bent head lying within said sleeve, ears upon the inner end of said sleeve in contact with opposite sides of said central web, and securing means extending through said ears.

4. A brake-head-supporting sleeve having a longitudinal beam-receiving slot therein extending from the inner end of said sleeve, the other end of said slot being closed, and an attaching ear at the inner end of said sleeve at each side of said slot.

5. A brake head having a hub, the peripheral wall of said hub having a beam-receiving opening therein, two opposite edge walls of which opening constitute stops.

6. A brake head having a hub, said hub having a beam-receiving slot therein extending from one end of said hub and stopping short of the other end, and means joining the portions of the hub at opposite sides of said slot at the first mentioned end of said hub.

7. A brake head having a hub, said hub having a beam-receiving slot therein extending from one end of said hub and stopping short of the other end, means joining the portions of the hub at opposite sides of said slot at the first mentioned end of said hub, said slot having a widened portion, two opposite edge walls of which widened portion constitute stops.

8. A brake head having a hub, said hub having a beam-receiving slot therein, one end of said slot being closed, lugs at oppo-

site sides of said slot at the other end of said slot, and removable means connecting said lugs.

9. A brake beam, and a brake head mounted to turn on said beam and peripherally slotted to admit said beam, the walls of the slot limiting relative movement between the beam and the head.

10. A brake beam, a brake head mounted to turn on said beam and slotted to admit the beam, and means for locking said brake head in adjusted position on said beam.

11. A brake beam comprising a web, a brake head mounted to turn on said beam and slotted to admit said web, the side walls of the slot constituting stops adapted to engage said web to limit the turning movement of said head, and means for locking said head in adjusted position on said beam.

12. A brake beam, a brake head having a hub by means of which said head is rotatably mounted on the beam, a locking block engaging the outer side of said hub for locking said brake head in adjusted position, and a spring carried by said beam for operating said locking block.

13. A brake beam structure, a brake head having a hub by means of which said head is rotatably mounted on the beam, said hub being slotted, a locking block having a stem extending through said slot and entering a recess in said beam structure, means engaging said block and extending into the beam structure, and a spring in said beam structure operatively connected to said means for moving said block.

14. A brake beam structure, a brake head rotatably mounted on said structure, a block engaging said brake head, a bolt engaging said block, a nut on said bolt within said beam structure, a spring interposed between the fixed part of said beam structure and said nut, and means for preventing said nut from turning.

15. A brake beam structure, a brake head rotatably mounted on said structure, a block engaging said brake head, a bolt engaging said block, a nut on said bolt within said beam structure, a spring interposed between the fixed part of said beam structure and said nut, a washer on said bolt engaging said nut, said washer having lugs thereon, and slotted portions in said beam structure receiving said lugs.

16. A brake beam comprising a member having a sleeve secured thereto; a brake head having a hub rotatably mounted on said sleeve, said hub being slotted; a locking block engaging the outer side of said hub and having a stem extending through said slot into a recess in said sleeve; a bolt extending through said locking block into said sleeve; a nut on said bolt within said sleeve; a washer on said bolt engaging said nut;

means to prevent said washer from turning; and a spring interposed between a fixed portion of said sleeve and said washer.

17. A brake beam, a brake head having a
5 hub by means of which the head is rotatably mounted on the beam, a locking block engaging the outer side of said hub, and means for yieldingly holding said block in

engagement with said hub, said means being operable to hold said block unyieldingly 10 in engagement with said hub.

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