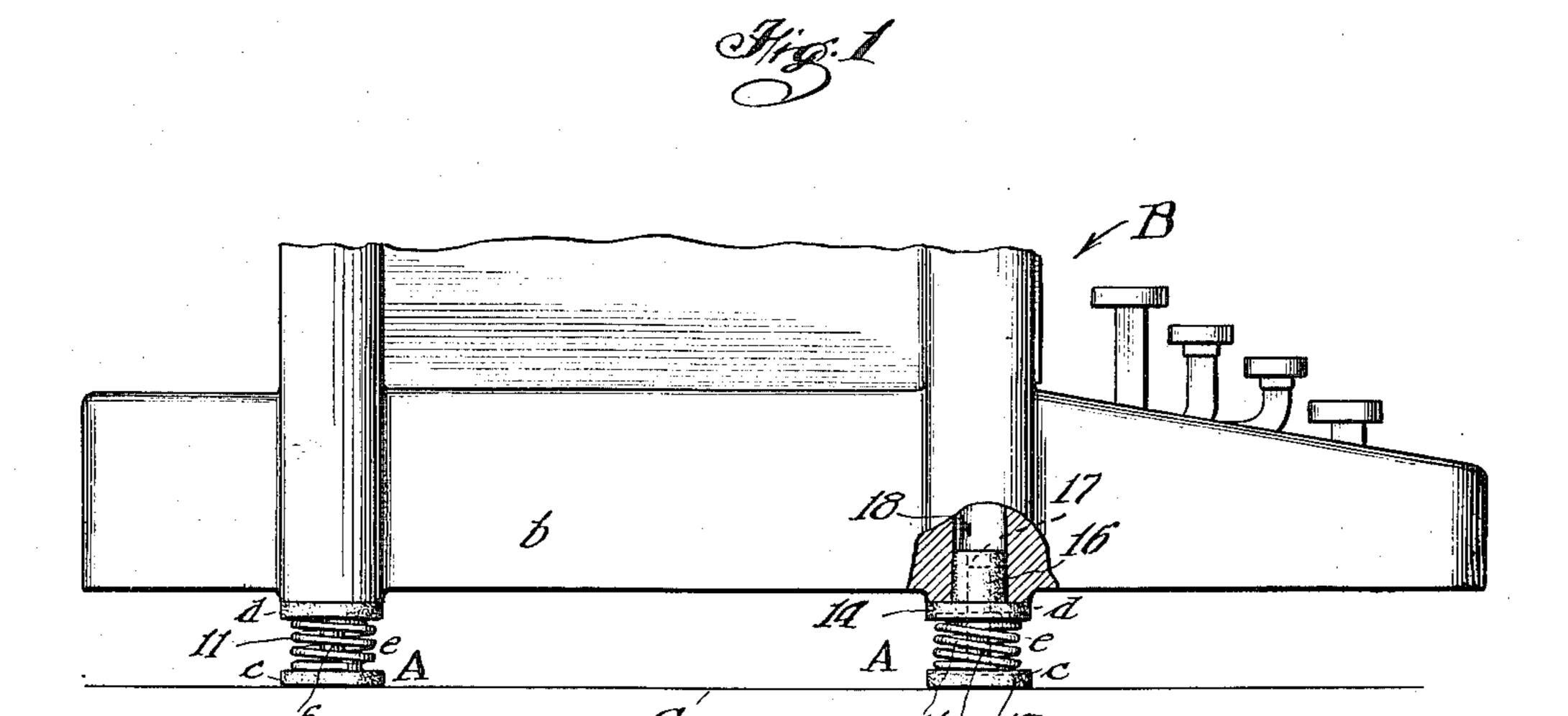
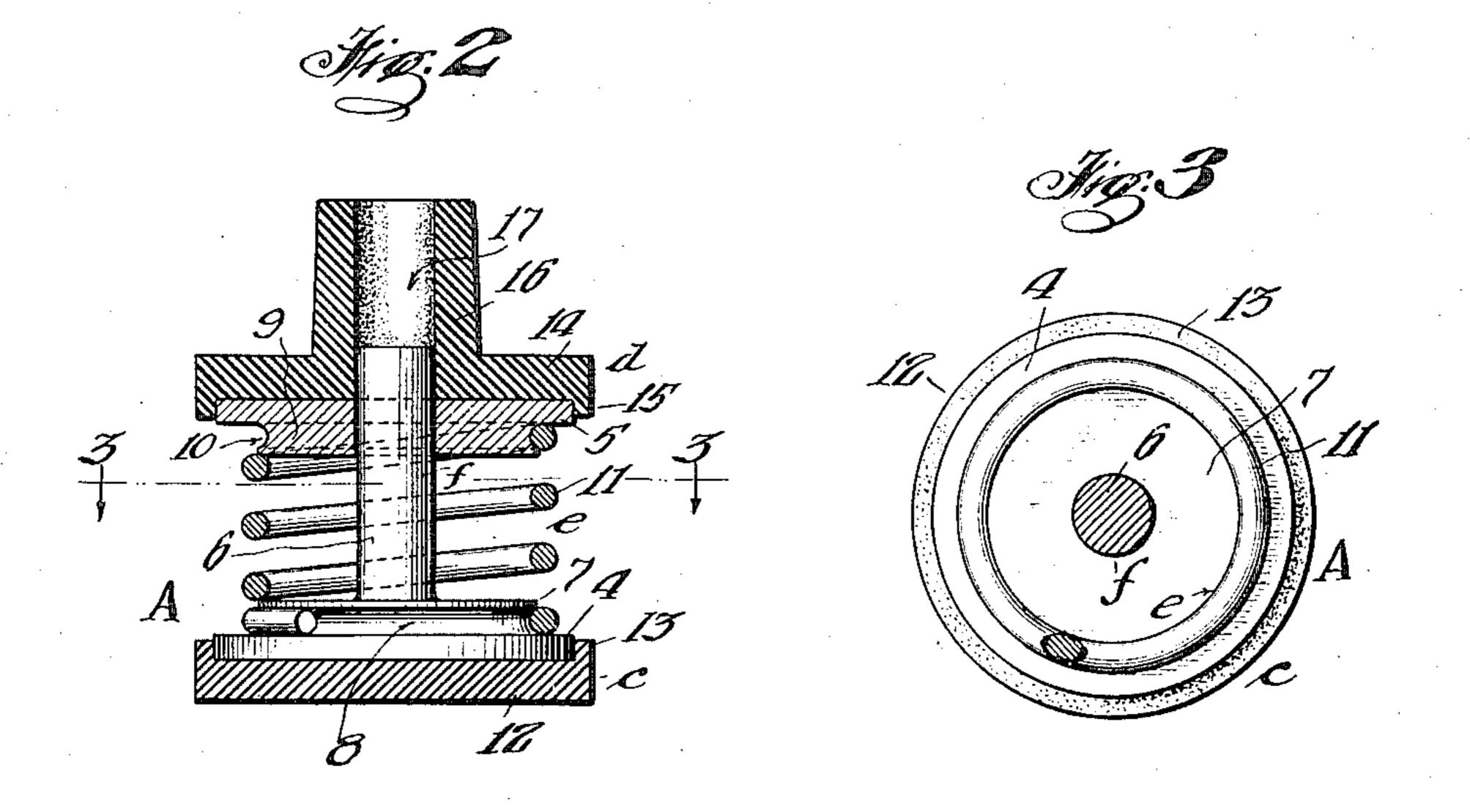
## C. M. TURTON.

TYPE WRITER ATTACHMENT.
APPLICATION FILED JULY 8, 1909.

998,814.

Patented July 25, 1911.





Mitteesses: Millaushild Mande Mielixen

Invertor; Charles M. Turton; by Buffert Hulleslee his attorneys;

## UNITED STATES PATENT OFFICE.

CHARLES M. TURTON, OF LOS ANGELES, CALIFORNIA.

## TYPE-WRITER ATTACHMENT.

998,814.

Specification of Letters Patent. Patented July 25, 1911. Application filed July 8, 1909. Serial No. 507,251.

To all whom it may concern:

Be it known that I, Charles M. Turton, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Type-Writer Attachments, of which the following is a

specification.

This invention relates to typewriter at-10 tachments; and more particularly to attachments for supporting typewriters resiliently, tensionally or yieldingly, in entirety, whereby, in a given instance, the typewriter may be to a degree vibratorily insulated 15 from the supporting structure, lessening the noise accompanying the operation of the typewriter, and whereby from the operation itself may be eliminated a considerable portion of the jar and shock incident to the 20 play and limitations of play of the keys. The attachment, organized according to the invention, will thus serve to a definite degree as a shock absorber, rendering the use of the typewriter less unpleasant to and less 25 a strain upon the nerves and muscles of the operator, and decreases greatly the irritation to the nerves of other persons within hearing distance of its point of operation.

In addition to the above objects, the in-30 vention is directed at the provision of a typewriter attachment of the general nature set forth which will be relatively simple and inexpensive in construction, durable, positive and responsive in operation, and gen-35 erally superior in point of efficiency and

serviceability.

With the above and other objects in view, the invention consists in the novel provision, construction, combination, association and relative arrangement of parts, members and features, all as hereinafter described, shown in the drawing, and finally pointed out in claims.

In the drawing:—Figure 1 is a side ele45 vation, partly in section and partly broken
away for clearness of illustration, of a portion of a typewriter frame and certain typewriter features, together with typewriter
attachments embodying the invention, said
50 figure illustrating the method of application and use of the improved attachment
constituting the invention in assemblage
with a typewriter; Fig. 2 is an enlarged
detail vertical sectional view of one of the
55 attachments shown in Fig. 1; and, Fig. 3 is
a transverse sectional view, taken upon the

line 3-3, Fig. 2, and looking in the direction of the appended arrows.

Corresponding parts in all the figures are denoted by the same reference characters. 60

Referring with particularity to the drawing, A designates the attachment embodying the invention, two of the same being illustrated in Fig. 1 as operatively applied to a typewriter B, and in connection with 35 one of the side frame members b thereof. The attachments A, which serve as feet for the typewriter, are disposed beneath the latter and between the same and a supporting structure C, which may con-70 sist of an upper surface of a desk, table or other object. The attachments or feet A are preferably provided in such plurality and at such points, as to support the typewriter in entirety. Each of the attach- 75 ments or feet A comprises two relatively moveable members, c and d respectively, and tension means e and operative connections fbetween the members c and d. One of the members c of each attachment is formed to 30 rest upon the supporting structure C; and the other of the members d is adapted and formed to bear against or with relation to the typewriter or a frame member b thereof. The impact of the blows of the keys and 35 type bars upon the other parts of the typewriter causes relative movement of the members c and d, which relative movement is opposed by the tension means e; and it therefrom results that the typewriter rises 90 and falls in partial compensation for the stress of the blows accompanying the manipulation of the keys, so that the normal abrupt terminations of the play of each key and its attendant parts is converted into 95 slight movement of the entire typewriter. The jar and noise normally accompanying the operation of the keys and attendant parts, with respect to the nerves and muscles of the operator, are thus modified if not en- 100 tirely eliminated. Furthermore, as the impact of the moving parts of the typewriter is transmitted to the supporting structure C through the resilient tension means e, the force of such impact is largely taken up by 105 the tension means, and the supporting structure is but slightly vibrated in common with the typewriter. The noise and clatter usually accompanying the operation of the typewriter is thus substantially modified.

One particular construction and arrangement of parts and features of a typewriter

attachment embodying the invention, having the general characteristics above set forth, is as follows:—The members c and dcomprise respectively disks 4 and 5, prefer-5 ably circular, from the former of which uprises a centrally located stem or post 6 which is received by and passes through a similarly proportioned opening formed centrally of the disk 5, the post and said open-10 ing being preferably cylindrical in form. The disk 4 is provided upon the facial portion opposed to the disk 5 with a circular flange 7 having a peripheral groove 8; and upon the disk 5 is formed or located a simi-15 lar circular flange 9 having a corresponding peripheral groove 10. A coil spring 11 is disposed between the disks 4 and 5, the end portions of the same being seated in and received by the grooves 8 and 10, as clearly 20 shown in Fig. 2, said spring 11 constituting the tension means e. The coil spring 11 loosely surrounds and incloses the stem or post 6 which is free to play within the same. The disk 4 is provided with a pad or cap 12 25 which covers the surface of the same which is exposed to wear; said pad or cap being provided with an edge flange 13 which surrounds the periphery of the disk 4. The pad or cap and its flange are preferably 30 composed of rubber or rubber composition, and the elasticity thereof causes the flange 13 to bind upon the disk 4 and hold the pad or cap in place. The disk 5 is preferably provided with a

35 pad or cap 14 fitting the wearing surface thereof and having an edge flange 15 which surrounds the periphery of the disk 5, the pad 14 and its flange 15 being preferably of rubber or rubber composition so that the 40 elasticity of the same causes the flange to bind upon the disk and hold the pad or cap in place. The pad or cap 14 is provided with a centrally located tubular nipple 16 which rises from the face thereof opposite 45 to that which is in contact with the disk 5; the pad or cap 14 being provided with a central opening in registration with the tubular passage 17 in said nipple; said passage 17 and the said registering opening in the cap 50 14 both registering with a central opening through the disk 5, and all accommodating the stem or post 6 and being of substantially the same form and dimensions so that the stem 6 can play within the tubular passage 17.

Disks 4 and 5 and their flanges 7 and 9 are preferably of integral metallic formation, in each pair, and the stem or post 6 is preferably metallic in nature and may be attached to the disk 4 and its flange 7 or formed in-60 tegrally therewith.

The operation, method of use and advantages of the improved attachment constituting the invention will be readily understood from the foregoing description, 65 taken in connection with the accompanying

drawing and the following statement:— Each of the attachments or feet A, organized as set forth and illustrated, and with the parts and features thereof assembled as shown in the drawing, is connected with the 70 typewriter or a frame member b thereof, by inserting the tubular nipple 16 of the cap 14 within a frame opening 18 which the nipple 16 is formed to fit. The frame then rests directly upon the disk 5, being the upper of 75 the two disks, or upon the pad or cap 14 which covers the upper surface of the same. The disk 4, or its pad or cap 12 is then placed upon the desk or other supporting structure C. The weight of the typewriter 30 or that portion of the same which is imposed upon the respective pad or cap 14, is transmitted to the supporting structure C through the two pads or caps 12 and 14, the two disks 4 and 5 and the interposed coil spring 85 11. The stem or post 6 acts as a centering means to keep the other parts in proper alinement and arrangement, so that the members c and d may have proper relative play as determined by the elasticity of the 90 tension means e, said stem or post 6 playing freely within and through the openings in the disk 5 and the pad or cap 14 together with the tubular passage 17 in the nipple 16. The nipple 16 prevents displacement of the 95 entire attachment from the frame of the typewriter, fitting closely within the frame opening 18. The rubber or otherwise compressible pads or caps 12 and 14 supplement the resilient function of the spring 11 and 100 prevent friction of the disks 4 and 5 between and in connection with the supporting structure and the typewriter.

It will be understood that the action of each of the attachments A throughout the 10t plurality of the same employed in any given instance is the same as that above described; each attachment serving in the common function of resiliently and yieldingly supporting its superimposed portion of the 110 typewriter with the advantages and objects fully hereinbefore recited.

I do not desire to be understood as limiting myself to the specific provision, construction and arrangement of parts, mem- 115 bers and features shown and described as embodying the invention; but reserve the right to vary the same, in adapting the invention to varying conditions of use, without departing from the spirit of the inven- 120 tion and the terms of the following claims. Having thus described my invention, I

claim and desire to secure by Letters Patent: 1. A typewriter attachment, comprising two relatively movable members one of 125 which is formed with an opening, a post projecting from the other member and playing through said opening, tension means disposed between the said members, and an elastic pad applied to the outer face of each 130

of the members, one of the elastic pads being formed with a nipple adapted to enter the

opening in the foot of a typewriter.

2. A typewriter attachment, comprising 5 two relatively movable members one of which is formed with an opening, a post projecting from the other member and playing through said opening, tension means interposed between the said members, and an 10 elastic pad applied to the outer face of one of the members, and formed with a nipple adapted to engage the opening in the foot of a typewriter.

3. A typewriter attachment, comprising 15 two relatively movable members of which the uppermost has a tubular passage, an elastic cap surrounding said passage and having a tubular nipple adapted to enter the typewriter foot, the bore of the nipple being 20 alined with said passage, a post projecting

from the lowermost member and entering said alined bores, and tension means dis-

posed between the members.

4. A typewriter attachment, comprising <sup>25</sup> an elastic pad, a metal disk thereon, a post rising from the disk, a coil spring supported by the disk and surrounding the post, a second disk supported by the spring and having an opening fitting around the post, and 30 an elastic cap carried by the uppermost disk and having a tubular nipple shaped to engage the typewriter foot and whose bore is alined with said opening.

5. A typewriter attachment, comprising an elastic pad, a metal disk thereon, a post 35 rising from the disk, a coil spring supported by the disk and surrounding the post, a second disk supported by the spring and having an opening fitting around the post, and an elastic cap supported by the uppermost 40 disk and having a nipple rising from its center and adapted to enter the typewriter foot, the cap and nipple being provided with a passage alined with said opening.

6. A typewriter attachment, comprising 45 an elastic pad, a disk resting upon the pad and formed upon its upper face with a grooved part, a post rising from the disk, a second disk formed with an opening loosely receiving the post and provided upon its 50 lower face with a grooved part, a coil spring surrounding the post and interposed between the disks, the ends of the coil spring being secured in the before mentioned grooved parts of the disks, and an elastic 55 cap supported by the second disk and formed with a nipple adapted to enter the opening in a typewriter foot.

In testimony whereof, I have signed my name to this specification in the presence of 60

two subscribing witnesses.

## CHARLES M. TURTON.

Witnesses:

RAYMOND IVES BLAKESLEE, FRED A. MANSFIELD.