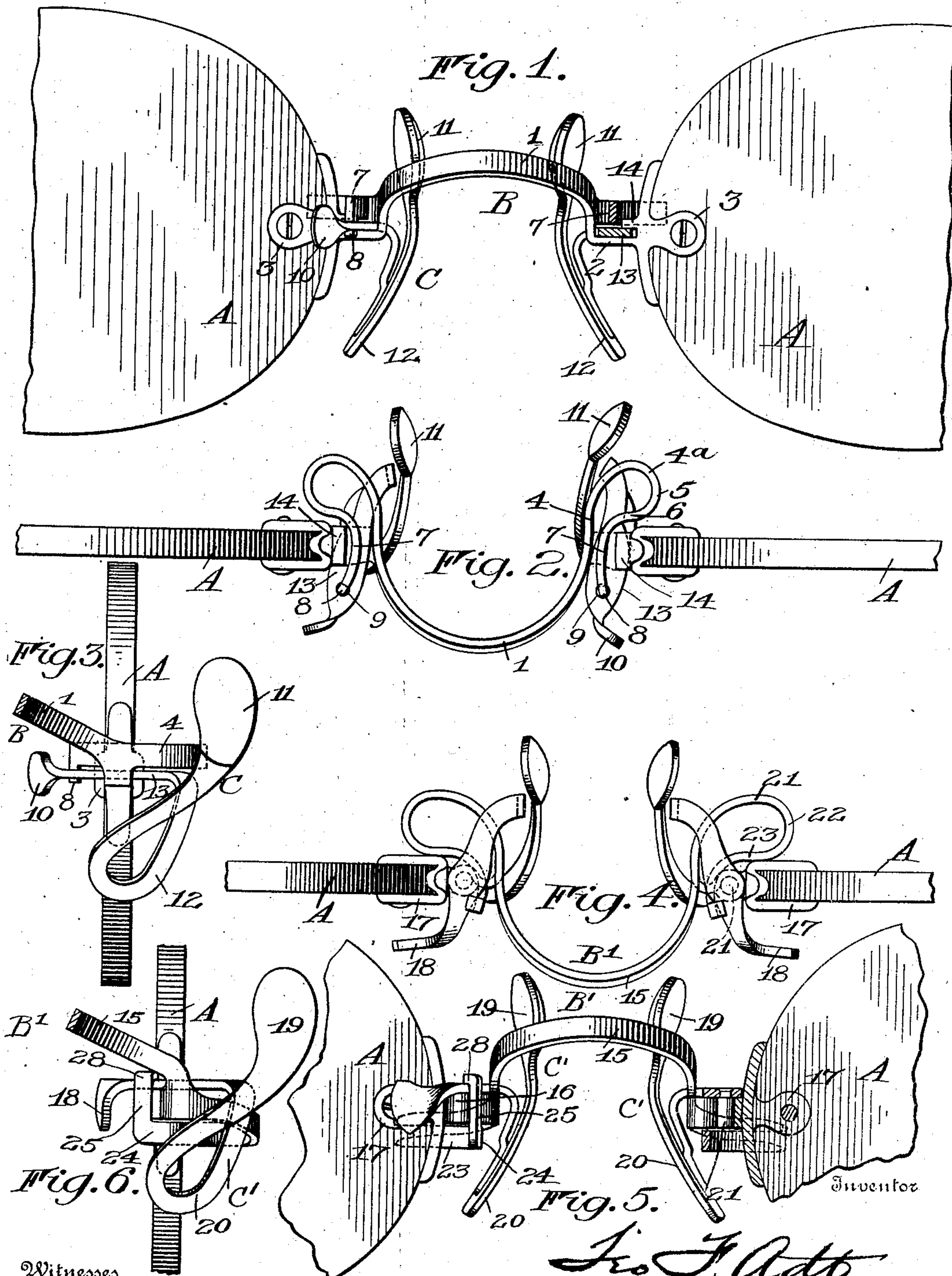


994,233.

Patented June 6, 1911.



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UNITED STATES PATENT OFFICE.

LEO F. ADT, OF ALBANY, NEW YORK.

EYEGLASSES.

994,233.

Specification of Letters Patent.

Patented June 6, 1911.

Application filed June 21, 1907. Serial No. 380,027.

To all whom it may concern:

Be it known that I, LEO F. ADT, of the city of Albany, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Eyeglasses; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of the specification, and to the reference-numerals marked thereon.

This invention relates to eyeglasses of the type in which the lenses are connected by a substantially rigid support holding them against relative movement, and the nose guards are arranged to swing thereon and are operated by extensions serving as finger pieces; one object of the invention being to provide a mounting in which the support has spring portions acting to position the nose guards and also, if desired, to retain the guards thereon; and a further object being to provide nose guards having shiftable fulcrums which cause the guards to move away from the nose quickly at first and then slowly, thus expediting the removal or the positioning of the eyeglasses without increasing the length of movement of the nose guards.

To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is a front view of a pair of eyeglasses constructed in accordance with my invention, parts being shown in section; Fig. 2 is a top view of the same embodiment; the guards being shown in different positions; Fig. 3 is a central transverse section of the same embodiment; Fig. 4 is a top view of another embodiment; Fig. 5 is a front view of the mounting of the same embodiment showing parts in section, and Fig. 6 is a central transverse section of the embodiment shown in the last two figures.

The invention which is susceptible of being constructed in various ways, in the embodiment shown in Figs. 1 to 3 comprises lenses A rigidly connected to a suitable support B the bridge of which in this instance is formed from flat stock bent to provide an arched bridging portion 1 and horizontally presented seats 2 at the ends of the bridging

portion preferably in the form of lugs which are suitably secured to lens attaching members 3 of any desired construction forming part of the support and each having, in this instance, edge bearing portions extending in opposite directions to cooperate with the edge of a lens. The nose guards C are mounted on the support and each preferably comprises a forwardly projecting operating arm 10 and a rearwardly projecting nose engaging member preferably consisting of an upper bearing pad 11 and a lower bearing pad 12. Each guard in this instance rests on a seat formed by one of the lugs 2 and has a rocking bearing on the support, or in other words, has a shiftable fulcrum, whereby the nose engaging member is caused to first move quickly away from the nose and then slowly so that the removal of the eyeglasses may be expedited without increasing the length of movement of the guards. In the present instance, the rocking bearing comprises a vertical curved portion or edge 13 on a guard which bears against a flat face on the inner or proximate side of the edge bearing portion of a lens attaching member, the guard being held against vertical movement on the seat 2 by an overhanging lug 14 projecting inwardly over the seat from the edge bearing portion of the lens attaching member and forming with the said seat 2 an open bearing.

The nose guards are positioned and at the same time held on the mounting by spring portions of the support which are made preferably from the stock from which the bridge is formed. In this instance the flat stock at each end of the bridging portion is extended rearwardly and horizontally at 4 and is bent flatwise outwardly as at 4^a, forwardly as at 5, and inwardly as at 6 and thence forwardly to provide a forwardly extending spring arm 7 above the seat 2, the several bends being employed to form a horizontal loop deflected partially in the rear of a lens so that it will be inconspicuous and at the same time give sufficient spring to the forwardly extending spring arm 7. At its free end, each arm 7 has a vertical projection 8 extending downwardly to engage within an opening 9 in the forwardly projecting operating arm 10 of one of the nose guards to form a detachable connection therewith. In positioning the eyeglasses the ends of the operating arms 10 are pressed toward each other, and the glasses are placed

in a position so that the nose may be engaged on opposite sides when the operating arms are released, and in removing the glasses the operating arms are again pressed together. To separate the guards from the rest of the mounting the projections 8 on the arms are removed from the openings 9 and the guard is withdrawn rearwardly from the mounting.

10 In the embodiment shown in Figs. 4 to 6 the lenses A are connected by a substantially rigid support B' the bridge of which is formed from flat stock bent to provide an arched bridging portion 15 and a vertical open bearing 16 at each end, each bearing being made from a forwardly extending arm at the end of the bridging portion rolled rearwardly and rigidly secured to one of the lens attaching member 17 which may be of any suitable form. Supported on the seat formed by each bearing 16 is a nose guard C' which has a forwardly projecting operating arm 18, and a rearwardly extending nose engaging member consisting of the upper pad 19 and the lower pad 20. Each guard carries a pivot pin 21 to depend into one of the open bearings 16, and is held to the latter by a spring portion on the support which also serves to position the guard like a similar portion on the first described embodiment. The spring portions in this instance extend rearwardly from the ends of the bridging portion and are each made from the flat stock which is bent flatwise outwardly at 21 and slightly downward edgewise to a forwardly extending bend 22, thence inwardly horizontally at 23 and finally outwardly to provide a forwardly extending spring arm 24 arranged beneath the bearing portion of the bridge. At its free end each forwardly extending spring arm 24 has a vertical or upward extension 25 which engages the operating arm of a nose guard by overhanging the inner edge of the latter at 28, thereby retaining it in place upon the support. The operation in removing or positioning the eyeglasses is the same in this embodiment as in that first described but the guards are separated from and fitted to the support in a different manner. In this instance, to remove the guards the free ends of the arms 24 are moved toward each other so that the overhanging portions 26 will be moved to positions to permit the guards to be vertically withdrawn from the open bearings.

The invention herein disclosed provides eyeglasses which are inexpensive to manufacture and simple to manipulate. The parts are few and the separation or assembling thereof is comparatively easy as the use of separate springs and small screws or other fastening devices is dispensed with, except in the fastening of the lenses.

I claim as my invention.

65 1. In an eyeglass mounting, the combina-

tion with a support for the lenses and a nose guard, of a flat bearing on one of said parts and a curved bearing on the other adapted to rock on the flat bearing to cause the fulcrum point of the guard to shift on the movement of the latter, the bearing on the support being open to permit the guard to be removed by lateral movement thereof.

2. In an eyeglass mounting, the combination with the lenses and a support rigidly connecting them, of a nose guard having a rigid forwardly extending operating portion in front of the lenses and a nose bearing portion in rear of the support, a flat bearing on the support and a curved rigid bearing on the guard adapted to rock on the flat bearing to cause the fulcrum point of the guard to shift on the movement of the latter.

3. In eyeglasses, the combination with a support for the lenses and a nose guard movable on the support substantially in a horizontal plane, of cooperating bearings on the support and the guard having provision for shifting the fulcrum of the guard toward the rear as the guard is moved away from the nose.

4. In eyeglasses, the combination with a support for the lenses having a vertically arranged flat bearing thereon, of a nose guard mounted to swing in a horizontal plane on the support and having a vertically arranged curved bearing on its outer side cooperating with the flat bearing on the support.

5. In eyeglasses, the combination with a support for the lenses comprising a bridging portion, a lens attaching device, a horizontal portion connecting the bridging portion and the lens attaching device, and a lug extending inwardly from the lens attaching device and over the horizontal portion toward the bridging portion but having its end spaced from the latter, of a nose guard held between the lug and the horizontal portion, and a spring for positioning the guard.

6. In eyeglasses, the combination with a support for the lenses comprising a bridging portion and lens attaching device having a lens bearing portion provided with a vertically arranged bearing on its inner face, of a nose guard mounted to swing substantially in a horizontal plane and having a vertically arranged bearing cooperating with the bearing on the inner face of the lens attaching device.

7. In an eyeglass mounting, the combination with a support, and a nose guard mounted to swing thereon, of laterally separable bearings on the guard and the support, and a spring carried by the support for positioning the guard, detachably interlocking therewith and acting on the latter in a direction to retain the bearings in engagement and the guard in place.

8. In eyeglasses, the combination of a support for the lenses, comprising a bridging

portion, a lens attaching device, a portion connecting the bridging portion and the lens attaching device and a lug extending inwardly from the lens attaching device toward the bridging portion and over the connecting portion, with a nose guard mounted to swing between said lug and the connecting portion and removable between the end of the lug and the bridging portion, laterally separable bearings on the guard and the support, and a spring for positioning the guard acting on the latter in a direction to hold the bearings in engagement.

9. In eyeglasses, the combination of a support for the lenses comprising a bridging portion, a lens attaching device provided with an edge bearing portion having its inner face formed into a vertical bearing, a portion connecting the lens attaching device with the bridging portion, and a lug extending inwardly from the lens bearing portion above the vertical bearing and the connecting portion, with a nose guard lying between the lug and the connecting portion and having a vertical bearing cooperating with the vertical bearing on the support, and a spring for positioning the guard.

10. In eyeglasses, the combination with a support for the lenses comprising a bridging portion, a lens attaching device and a connecting portion, of a swingingly mounted nose guard arranged above the support between the lens attaching device and the bridging portion, and a forwardly extending spring arm secured to the support and detachably interlocking with the guard in front of said support.

11. In eyeglasses the combination with a support for the lenses comprising a bridging portion, a lens attaching device and a connecting portion, of a swingingly mounted nose guard arranged above the support between the lens attaching device and the bridging portion, cooperating bearings on the support and the guard, and a spring for the guard mounted out of engagement with the bearings and arranged over the connecting portion in vertical relationship with the guard.

12. In eyeglasses, the combination with a pair of lenses, of a support rigidly connecting them, having spring portions, and nose guards pivotally mounted independently of the spring portions on the support and positioned by the spring portions.

13. In eyeglasses, the combination with the lenses, of a substantially rigid support connecting the lenses having a spring arm, and a nose guard positioned by engagement with the spring arm in front of the support and mounted on the support independently of said spring arm.

14. In eyeglasses, the combination with a pair of lenses, of a substantially rigid support for the lenses having forwardly extend-

ing spring arms, and nose guards pivotally mounted on the support and having forwardly extending operating arms engaged by the spring arms to position the nose guards.

15. In eyeglasses, the combination with a pair of lenses, of a substantially rigid support for the lenses provided with rearwardly extending loops each having forwardly extending spring arms, and nose guards pivotally mounted on the support and having forwardly extending operating arms engaged by the spring arms.

16. In eyeglasses, the combination with a pair of lenses, and lens attaching members, of a bridge rigidly connecting said members, comprising a bridging portion, horizontal seats at the ends of the bridging portion and spring loops extending from the ends of the bridging portion, and nose guards pivotally mounted on the seats and positioned by the spring loops.

17. In eyeglasses, the combination with a pair of lenses, and lens attaching members, of a bridge rigidly connecting the lens attaching members and comprising a bridging portion, horizontal seats at the ends of the bridging portion and spring loops extending rearwardly from the ends of said portion and having forwardly extending arms, and nose guards pivotally mounted on the seats and having forwardly extending operating arms engaged by the spring arms.

18. In eyeglasses, the combination with a pair of lenses, of a substantially rigid support connecting the lenses and having open bearings and spring portions, and nose guards, retained on the open bearings by the spring portions of the support.

19. In eyeglasses, the combination with a pair of lenses, of a substantially rigid support connecting the lenses, and having open bearings and forwardly extending spring arms, and nose guards having forwardly extending operating arms engaged by the spring arms to retain the guard on the open bearings.

20. In eyeglasses, the combination with a pair of lenses, of a substantially rigid support connecting the lenses, and having open bearings and rearwardly extending loops formed with forwardly extending spring arms, and nose guards having forwardly extending operating arms engaged by the spring arms to retain the guards on their open bearings.

21. In eyeglasses, the combination with a pair of lenses, of a substantially rigid support connecting the lenses and having overhanging portions, and nose guards each retained on the support beneath one of the overhanging portions and having its outer side edge formed with a curved bearing surface.

22. In eyeglasses, the combination with a

pair of lenses, of a substantially rigid support connecting the lenses and having overhanging portions and spring portions, and nose guards each retained by a spring portion on the support, beneath an overhanging portion and having its outer side edge formed with a curved bearing surface.

23. In eyeglasses, the combination with a pair of lenses, of a substantially rigid support connecting the lenses and having spring loops deflected in rear of the lenses, and nose guards pivotally connected to the support and positioned by the spring loops.

24. In eyeglasses, the combination with a substantially rigid support, and a nose guard mounted on the support to swing in a substantially horizontal plane, of an open bearing on one of said parts permitting the detachment of the guard, and a spring for positioning the guard detachably interlocked with the latter and acting thereon in a direction to hold the bearing thereof in coöperative relation with the bearing of the other.

25. In an eyeglass mounting, the combination with a support for the lenses, and a nose guard mounted to swing thereon, of a spring carried by the support having a looped portion upon one side of the turning axis of the guard, and an arm extended from the looped portion and detachably interlocking with the guard upon the opposite side of the turning axis of the latter.

26. In an eyeglass mounting, the combination with a support for the lenses and a nose guard mounted to swing thereon, of a spring carried by the support and having a looped portion coiled about an upright axis to one side of the turning axis of the guard, and an arm extended from the looped portion and detachably interlocking with the guard upon the opposite side of the turning axis of the latter.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
