

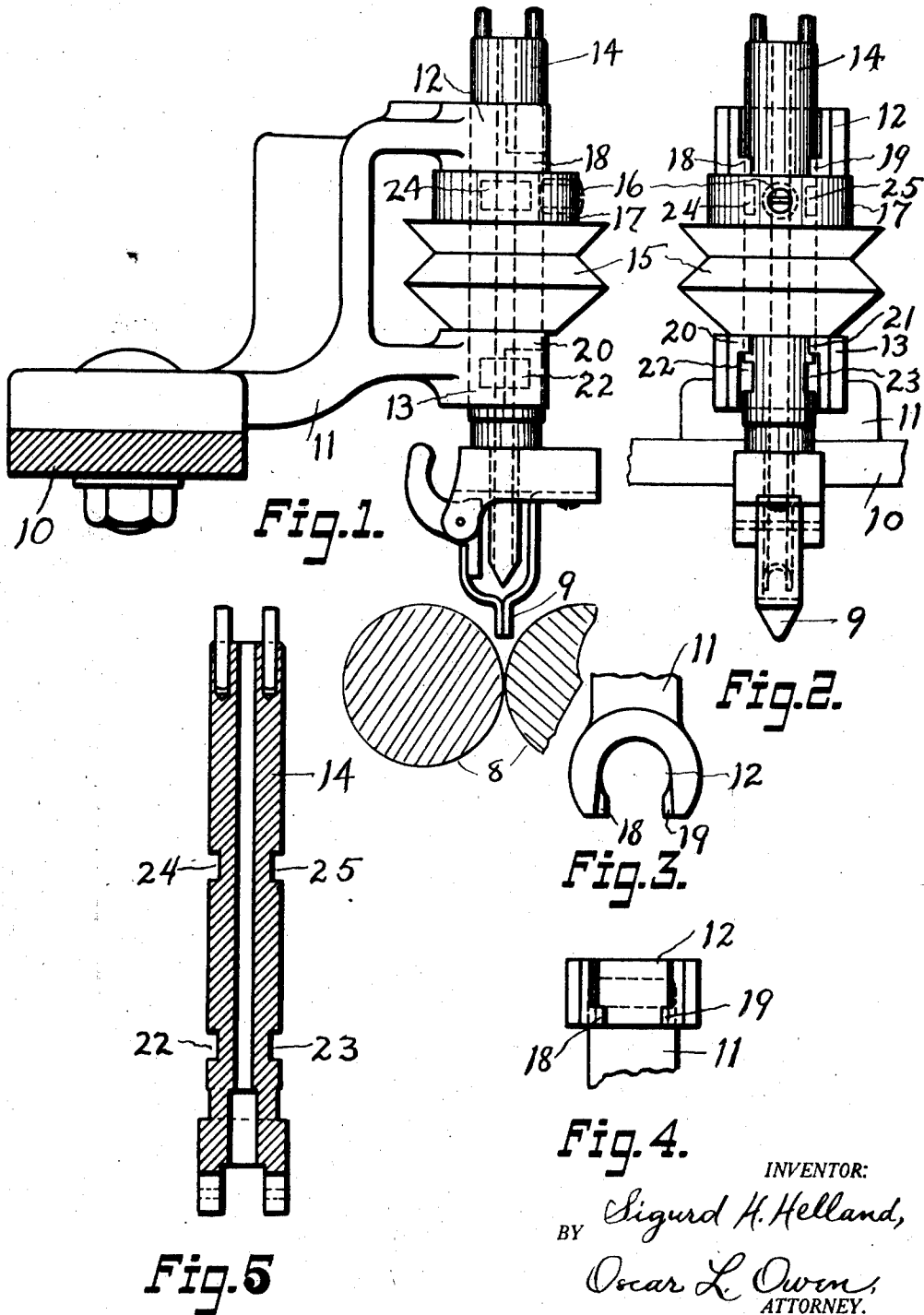
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TWISTING HEAD FOR SPINNING MACHINES

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TWISTING HEAD FOR SPINNING MACHINES.

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This invention relates to machines for spinning wool or cotton waste and has particular reference to the twisting head and the parts co-operating therewith.

5 In spinning machines as now constructed each twisting head is rotatable in an upper and a lower closed bearing integral with a bracket bolted to the framing of the machine. If occasion requires the removal of
10 a head it is necessary to remove its bracket from its position on the machine framing thus entailing considerable expense for labor and loss in the productive capacity of the machine due to the necessary stoppage to
15 effect the change.

The object of my invention is to provide a twisting head so constructed as to be readily removed from its supporting bearings with a minimum amount of time and
20 labor.

This invention will be fully understood from the following description considered in connection with the accompanying drawings in which Figure 1 is a side elevation of
25 a twisting head in its supporting bracket and shows the relation of the yarn engaging means on the head to the drawing rolls; Figure 2 is a front elevation of the twisting head and its bearings; Figure 3 is a
30 plan of the upper twisting head bearing; Figure 4 is a front view of the upper bearing, and Figure 5 is an axial sectional view of the tubular body of the twisting head.

Referring to the drawings, 8 represents
35 the drawing rolls, 9 the yarn engaging means on the twisting head, 10 designates a stationary rail horizontally positioned in the framing of a spinning machine, 11 a yoke shaped bracket fastened to the rail 10 and provided with U shaped bearings 12 and 13
40 in the upper and lower arms of the yoke respectively. A twisting head 14 is rotatably mounted in the bearings and is axially positioned therein by the shoulders of the
45 power transmitting whirl 15 abutting between the inner ends of the bearings 12 and 13, the whirl being adjustably mounted on the twisting head and fixed thereon by the set screw 16 in the hub 17 of the whirl.

50 Each bearing is provided with a pair of oppositely disposed lugs 18 and 19, 20 and 21 partially embracing the tubular body of the twisting head and so formed as to retain

the said tubular body in its normal operative position in its bearings. This construction
55 of the bearings provides an opening of a predetermined width between the ends of the oppositely disposed lugs which allows space for the removal of the twisting head from its bearings by the co-action of the lugs
60 with two pairs of oppositely disposed lateral cutouts 22 and 23, 24 and 25 in the periphery of the tubular body of the twisting head. The axial distance between the two pairs
65 of cutouts being the same as that between the upper and lower pairs of retaining lugs so that when the cutouts register with the lugs the twisting head may be drawn out from its bearings, there being ample clear-
70 ance in the cutouts for the free passage of the tubular body between the lugs.

If it is desirable to remove the twisting head from the machine, the set screw 16 in the hub of the whirl 15 is loosened sufficiently to allow the tubular body of the
75 twisting head to be raised until the cutouts register with their respective bearing lugs, then the operative draws the twisting head sideways clear from its bearings without the necessity of disturbing any other parts
80 of the machine.

While I have illustrated herein a preferred embodiment of my invention, I do not wish to be limited to the constructional
85 features shown.

I claim:

In a spinning machine, a twisting head comprising a rotative tubular body having yarn engaging means at its lower end, two U shaped bearings one above the other in
90 which the tubular body is rotatable, a whirl transmitting motion to the tubular body and adjustably mounted thereon between the bearings, two oppositely disposed lugs on each bearing partially embracing the tubular
95 body for normally retaining said body in its bearings, and an upper and a lower set of oppositely disposed lateral cutouts in the periphery of the tubular body adapted to register with the retaining lugs of the upper
100 and lower bearings respectively thus facilitating the removal of the tubular body from its bearings.

In testimony whereof, I have signed this specification.

SIGURD H. HELLAND.