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PATENT SPECIFICATION

396,505

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Complete Left: April 27, 1933.

Complete Accepted: Aug. 10, 1933.

PROVISIONAL SPECIFICATION.

Improvements relating to Chain Cases for Cycles and the like.



We, MATCHLESS MOTOR CYCLES (COLLIERS) LIMITED, of Plumstead Road, London, S.E. 18, a British Joint-Stock Corporation, and HARRY STEVENS, of "Tingad", Windsor Avenue, Penn, Wolverhampton, in the County of Stafford, of British Nationality, do hereby declare the nature of this invention to be as follows:—

10 This invention relates to chain cases for cycles and the like and more particularly to the front or primary chain cases of motor cycles.

The invention has among its objects to provide a chain case of simple and inexpensive construction by which the constituent parts of the chain case are firmly held together without the possibility of rattling and so as to be readily separated when required for dismantling the case, or for repairs or renewals.

The chain case is advantageously provided of two substantially symmetrical parts generally of a dish-shaped section and advantageously of sheet metal such as steel separable in a central plane, the respective symmetrical parts being formed with corresponding outwardly extending flanges adapted to contact one with the other in coincident positions to form the complete case or enclosure.

According to the invention such parts of the chain case are held together by means of a sealing band advantageously provided of indiarubber that passes around the case to enclose the outwardly protruding coincident flanges, and the sealing band may be conveniently formed of a substantially semi-circular cross-section having a groove formed on its inner face adapted for the reception of the outer edges of the coincident flanges of the constituent parts of the chain case when set in contact with each other.

The sealing band is held in position by means of a clamping band advantageously of metal such as aluminium and externally applied around the gear case to cover and to enclose the sealing band, the clamping band being formed generally to the peripheral shape of the gear case and of a substantially semi-circular cross-section corresponding to the external

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curved or semi-circular face of the elastic sealing band and being adapted to be applied over the sealing band on the sealing band being set in position around the gear case.

For this purpose at one end of the gear case advantageously at the front or smaller end the clamping band may be divided and adjacent this position a pair of coincident lugs may be mounted on the adjacent ends of the clamping band, a screw passing through the lugs to draw the ends of the clamping band together for tightly holding the parts of the case together, it being understood that the clamping band may be extended out so that it may be conveniently brought in position to encircle the case and to cover and tightly to enclose the rubber sealing band, and on being set in position the lugs may be drawn together for tightly pressing the sealing band upon and around the case, and thus effectively holding the parts of the case together.

By such means the symmetrical parts of the chain case are held together in a simple manner whereby the respective parts may be readily separated and the gear case held closed without the possibility of rattling.

It will be understood that in carrying the invention into effect the respective substantially symmetrical parts of which the gear case is formed may be respectively provided with holes and with pressed-out parts, and that the respective parts of the case may each be pressed-out of a single sheet of metal, or the outer part for example may be built up with additional parts also pressed-out from sheet metal and secured to the pressed-out sheet of metal to form the outer part of the case. Thus the respective substantially symmetrical parts of which the case is composed may be provided as may be required to suit the construction of motor cycle to which it is to be applied.

The clamping band instead of being formed of a single part may be provided of a number of parts. It may for example be connected together in positions at the respective ends of the gear case.

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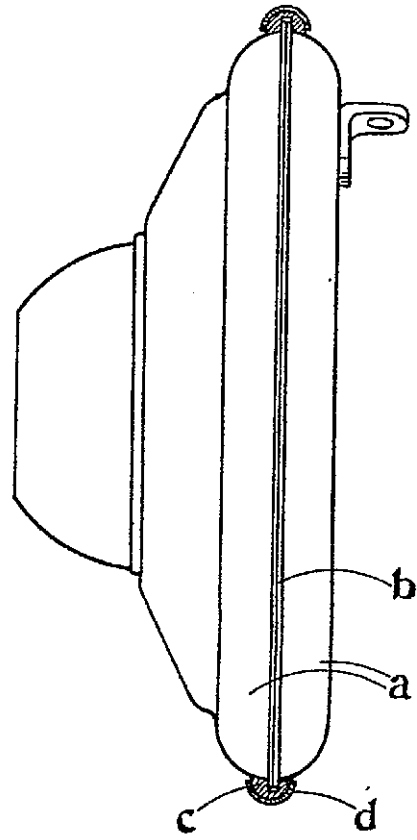
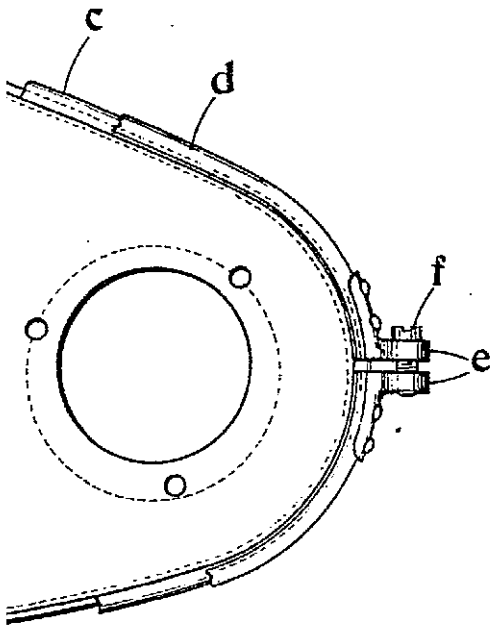
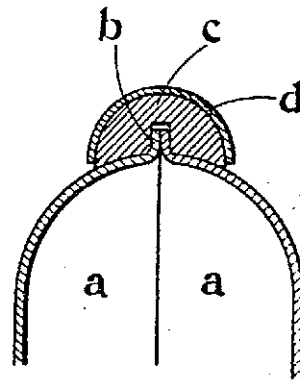
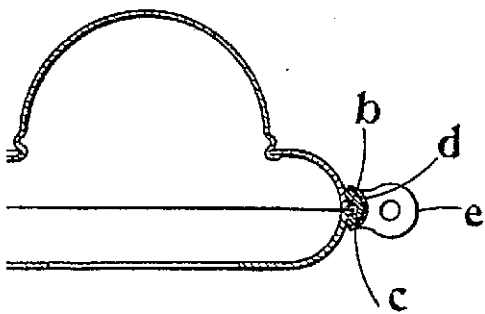


Fig. 3.



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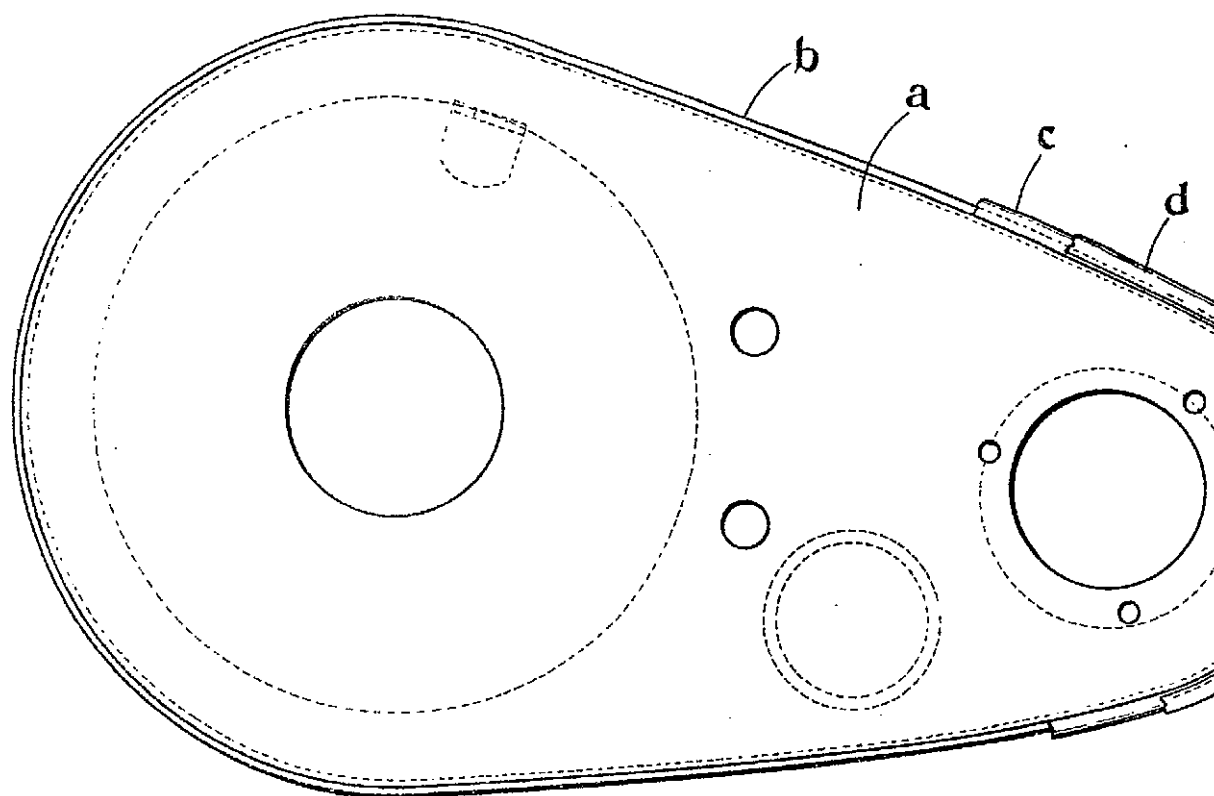


Fig. 1.

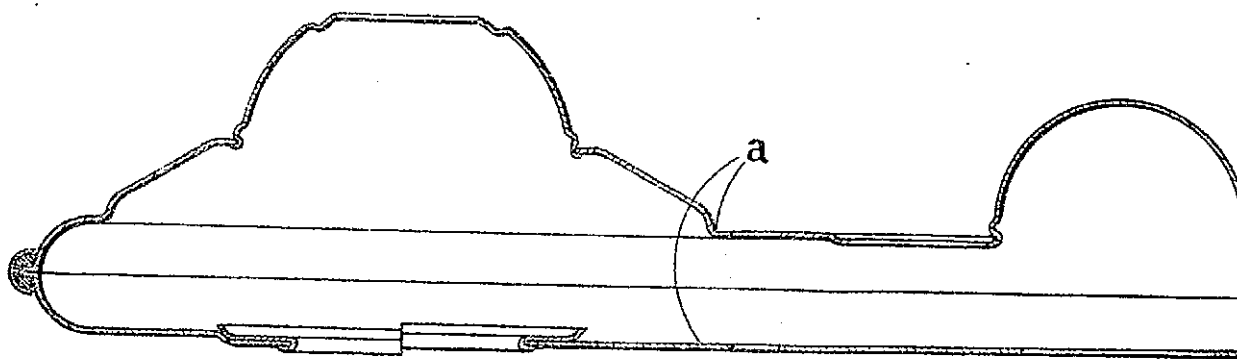


Fig. 2.

It will be understood that the parts of which the gear case is formed may be respectively provided with holes and with pressed-out parts, and that the respective parts of the case may each be pressed-out of a single sheet of metal, or the outer part, for example, may be built up with additional parts also pressed-out from sheet metal and secured to the pressed-out sheet of metal to form the outer part of the case. Thus the parts of which the case is composed may be provided as may be required to suit the construction of motor cycle to which it is to be applied.

The clamping band instead of being formed of a single part may be provided of a number of parts. It may, for example, be connected together in positions at the respective ends of the gear case.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A chain case for cycles, motor cycles, or the like, comprising separable parts which are held together by a sealing band embracing their meeting edges and a clamping band adapted to apply pressure to the sealing band.

2. Chain cases for cycles, motor cycles or the like, according to claim 1, in which the parts in the plane of separation, are formed with corresponding outwardly extending flanges adapted to contact one with the other.

3. Chain cases for cycles, motor cycles or the like, according to claim 2, in which the sealing band is formed with a groove in its inner face adapted for the reception of the outer edges of the coincident flanges of the constituent parts of the case.

4. Chain cases for cycles, motor cycles or the like, according to the preceding claim, in which the clamping band is shaped to the peripheral form of the parts at the plane of separation and has a cross-sectional shape to correspond to that of the sealing band.

5. Chain cases for cycles, motor cycles or the like, according to claim 4, in which the clamping band is provided of a number of parts.

6. Chain cases for cycles, motor cycles or the like, substantially as hereinbefore described with reference to the accompanying drawings.

Dated this 27th day of April, 1933.

EDWARD EVANS & Co.,
27, Chancery Lane, London, W.C. 2,
Agents for the Applicants.

Dated this 27th day of April, 1932.

EDWARD EVANS & Co.,
27, Chancery Lane, London, W.C. 2,
Agents for the Applicants.

COMPLETE SPECIFICATION.

Improvements relating to Chain Cases for Cycles and the like.

- We, MATCHLESS MOTOR CYCLES (COLLIERIES) LIMITED, of Plumstead Road, London, S.E. 18, a British Joint-Stock Corporation, and HARRY STEVENS, of "Timgad", Windsor Avenue, Penn, Wolverhampton, in the County of Stafford, of British Nationality, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—
- This invention relates to chain cases for cycles and the like and more particularly to the front or primary chain cases of motor cycles.
- The invention has among its objects to provide a chain case of simple and inexpensive construction by which the constituent parts of the chain case are firmly held together without the possibility of rattling and so as to be readily separated when required for dismantling the case, or for repairs or renewals.
- According to the invention the chain case is formed in parts which meet in a plane and which at the meeting edges are formed with coincident outwardly extending flanges, and such parts of the chain case are held together by means of a sealing band, advantageously provided of indiarubber, that passes around the parts of the case to enclose the outwardly protruding coincident flanges, the sealing band being held in position by a clamping band.
- The invention is illustrated by way of example in the accompanying drawings.
- Figure 1 is a side elevation of a chain case provided according to the invention, the sealing band and the clamping band being partly removed.
- Figure 2 is a sectional plan view of the chain case and the bands.
- Figure 3 is an end elevation of the chain case with the bands shown in cross-section.
- Figure 4 is a detail cross-section to a larger scale showing the bands and the coincident flanges of the parts of the chain case.
- In carrying the invention into effect in the manner represented in the accompanying drawings, the chain case is provided of two parts *a*, generally of a dish-shaped section and advantageously of sheet metal such as steel, separable in a central plane, the respective parts being formed with corresponding outwardly extending flanges *b* adapted to contact one with the other in coincident positions so that the parts form the complete case or enclosure.
- The sealing band *c* is conveniently formed of a substantially semi-circular cross-section having a groove in its inner face adapted for the reception of the outer edges of the coincident flanges *b* of the constituent parts *a* of the chain case when set in contact with each other. The sealing band is held in position by means of a clamping band *d* advantageously of metal, such as aluminium, and externally applied around the gear case to cover and to enclose the sealing band *c*, the clamping band being formed generally to the peripheral shape of the gear case and of a substantially semi-circular or other cross-section corresponding to the external curved or semi-circular or other face of the elastic sealing band *c* and being adapted to be applied over the sealing band on the sealing band being set in position around the gear case.
- For this purpose at one end of the gear case, advantageously at the front or smaller end, the clamping band *d* is divided and adjacent this position a pair of coincident lugs *e* may be mounted on the adjacent ends of the clamping band, a screw *f* passing through the lugs to draw the ends of the clamping band *d* together for tightly holding the parts *a* of the case together, it being understood that the clamping band may be extended out so that it may be conveniently brought in position to encircle the case and to cover and tightly to enclose the rubber sealing band *c*, and on being set in position the lugs *e* may be drawn one towards the other for tightly pressing the sealing band upon and around the case, and thus effectively holding the parts of the case together.
- By such means the parts of the chain case are held together in a simple manner whereby the respective parts may be readily separated and the gear case held closed without the possibility of rattling and against the leakage of oil or lubricant.

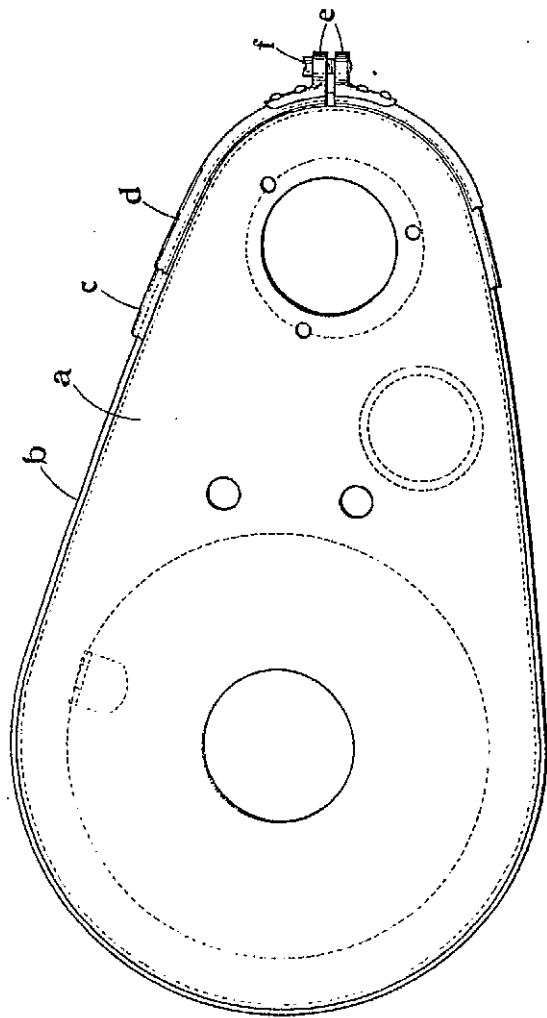


Fig. 1.

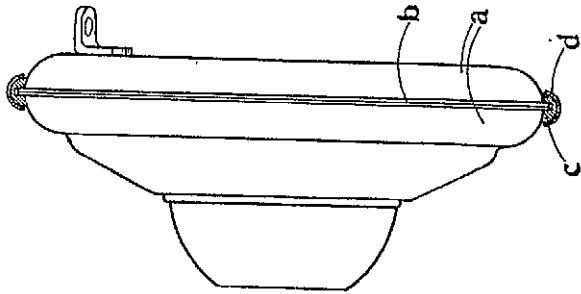


Fig. 3.

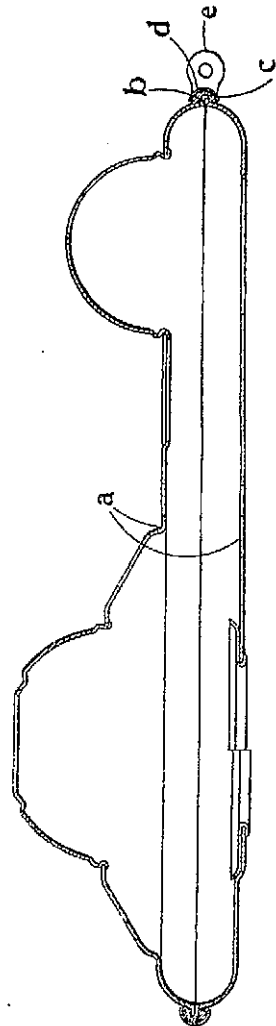
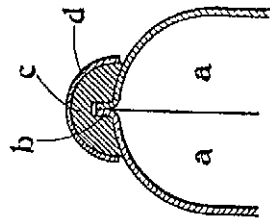


Fig. 2.



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