

No. 679,971.

Patented Aug. 6, 1901.

J. KENNEDY.
PINION HOUSING.

(Application filed Mar. 16, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

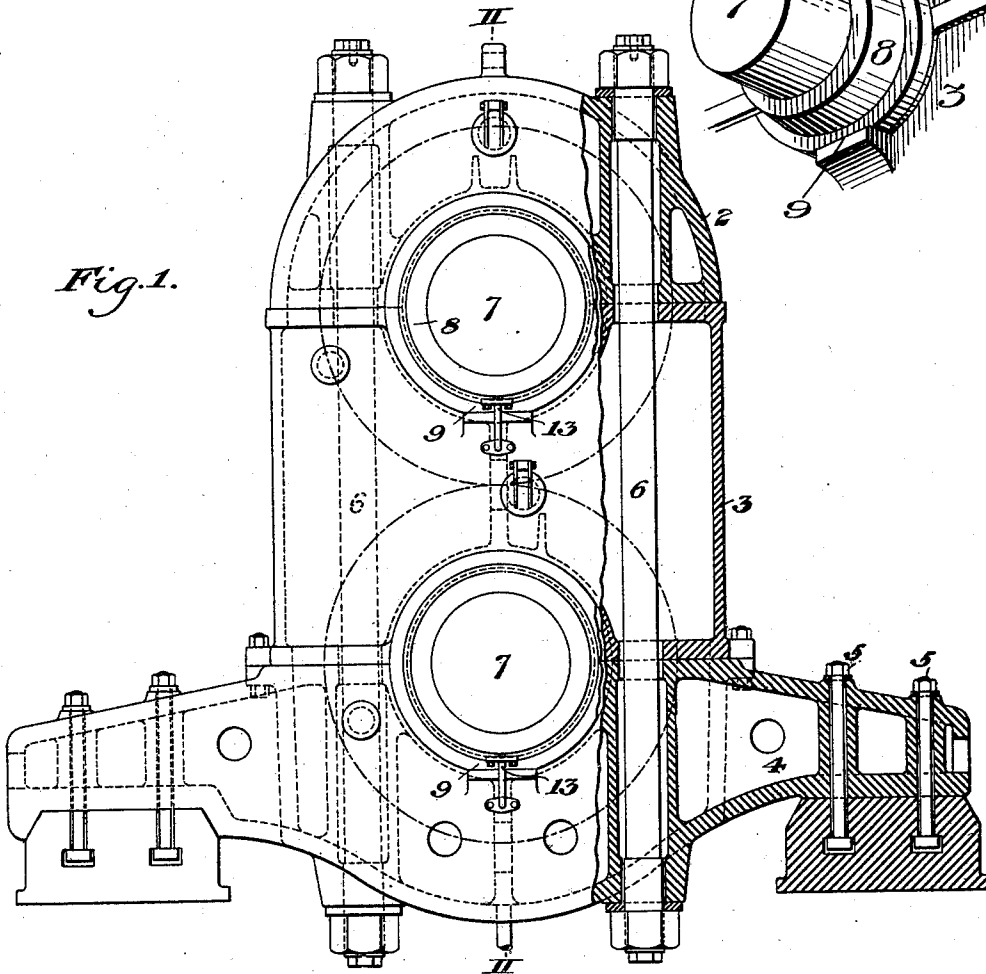


Fig. 1^a.

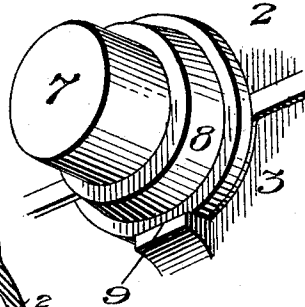
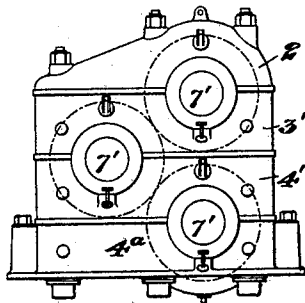


Fig. 3.



WITNESSES

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INVENTOR

Julius Kennedy
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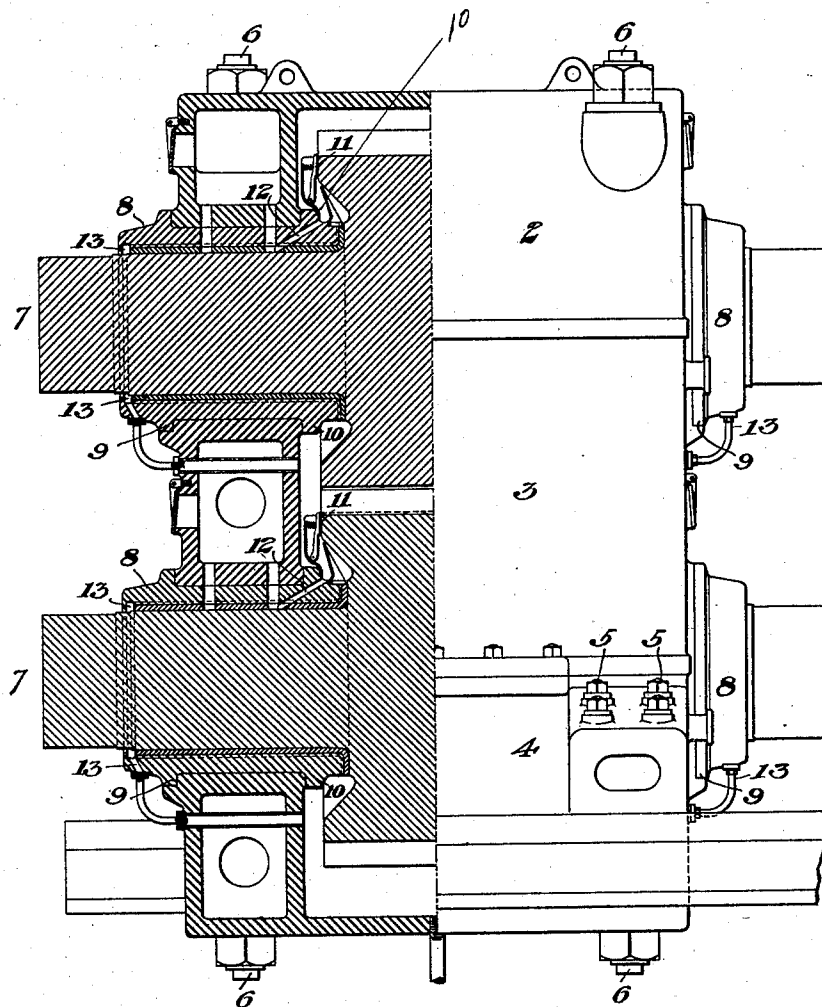
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Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JULIAN KENNEDY, OF PITTSBURG, PENNSYLVANIA.

PINION-HOUSING.

SPECIFICATION forming part of Letters Patent No. 679,971, dated August 6, 1901.

Application filed March 16, 1901. Serial No. 51,550. (No model.)

To all whom it may concern:

Be it known that I, JULIAN KENNEDY, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Pinion-Housing, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an end elevation of my improved pinion-housing, partly in vertical section. Fig. 1^a is a perspective view of a portion of the bearing and the adjacent housing. Fig. 2 shows the same partly in side elevation and partly in vertical section, the section-plane being on the line II II of Fig. 1. Fig. 3 shows in side elevation a modified construction of the housing.

My improved housing is made in sections, divided in planes which pass through or are substantially parallel with the axes of the pinions, the sections being interfitted and held by through-bolts.

In Fig. 1, 2, 3, and 4 are the sections of the pinion-housing. The lower section 4 is held to the foundation by bolts 5. The section 3 is placed upon it, and the section 2 is superposed upon the section 3, through-bolts 6 being employed to draw the sections together. The dividing-lines between the sections, as shown in the drawings, coincide with the axes of the pinions 7 7; but they may be parallel and not coincident therewith. In either case they are substantially in parallelism with the axes in the sense in which I use the word "parallelism" in this specification. The bearings 8 of these pinions are held between the adjacent sections and are formed with angular or projecting portions 9, which engage with the sections and prevent turning of the bearings. They are also formed with projections or collars 10, which interlock with the sections of the housings and, with the portions 9, prevent motion of the bearings in said sections and of the sections relatively to each other.

The sections are hollow, and when assembled they form a case in which the pinions are inclosed. The pinions can therefore be oiled by supplying a body of oil to the lower portion of the housing, so that it will be car-

ried and distributed by rotation of the pinions. In order to conduct the oil to the bearings, I prefer to provide wipers 11, which bear against the margin of the pinion and conduct the oil which they wipe therefrom to ducts 12, which lead to the bearings. Ducts 13 also preferably lead from the outer portion of the bearings back into the housings, so as to return the oil thereto.

In Fig. 3 I show a modified construction in which the housing is adapted to use with three or more pinions 7'. In this case I increase the number of sections of which the housing is constituted, using four sections 2', 3', 4', and 4^a. Other modifications of the device may be made by those skilled in the art.

The advantages of my invention will be appreciated by those skilled in the art. The housing is very substantial, only a few bolts are required, and it prevents the vibration of the housings and strains thereon which have been experienced heretofore in the use of housings for pinions of large size.

I claim—

1. A pinion-housing and pinions whose axes are in different horizontal planes, said housing being made in sections divided in planes which are in parallelism with the axes of the pinions; substantially as described.

2. A pinion-housing and pinions whose axes are in different horizontal planes, said housing being made in sections divided in planes which substantially pass through the axes of the pinions; substantially as described.

3. A pinion-housing and pinions whose axes are in different horizontal planes, said housing being made in sections divided in planes which are in parallelism with the axes of the pinions, and through-bolts by which the sections are held together; substantially as described.

4. The combination of pinions arranged at different levels, a pinion-housing formed in sections, and bearings for the pinions, said housing being divided into sections on planes which pass respectively through the bearings, said bearings being held between adjacent sections; substantially as described.

5. A pinion-housing made in sections, with pinion-bearings held between adjacent sec-

tions, said bearings having angular portions engaging the housing and adapted to prevent turning of the bearings; substantially as described.

- 5 6. A pinion-housing made in sections, with pinion-bearings held between adjacent sections, said bearings being interlocked with the housing-sections to prevent motion of the

latter on each other; substantially as described.

In testimony whereof I have hereunto set my hand.

JULIAN KENNEDY.

Witnesses:

H. M. CORWIN,
GEO. B. BLEMING.