

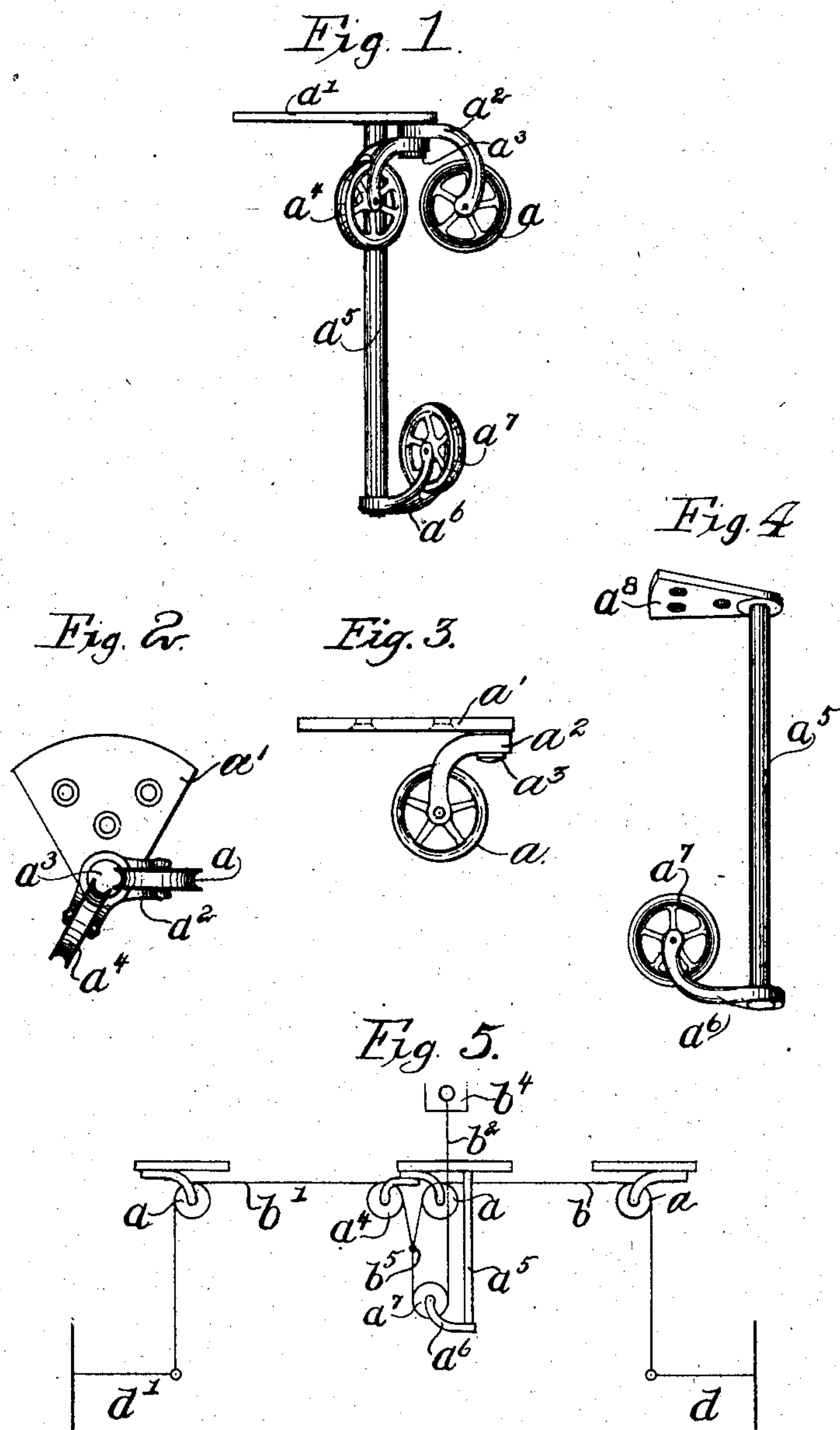
No. 778,285.

PATENTED DEC. 27, 1904.

G. H. TARLETON.

SUPPORTING DEVICE FOR DAMPER CHAINS OR THE LIKE.

APPLICATION FILED APR. 18, 1904.



Witnesses.
John C. Porter,
Louis S. Thierry.

Inventor.
George H. Tarleton,
by Geo. H. Maxwell
Atty.

UNITED STATES PATENT OFFICE.

GEORGE H. TARLETON, OF WATERTOWN, MASSACHUSETTS.

SUPPORTING DEVICE FOR DAMPER-CHAINS OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 778,285, dated December 27, 1904.

Application filed April 18, 1904. Serial No. 203,600.

To all whom it may concern:

Be it known that I, GEORGE H. TARLETON, a citizen of the United States, and a resident of Watertown, in the Commonwealth of Massachusetts, have invented a Supporting Device for Damper-Chains or the Like, of which the following description, in connection with the accompanying drawings, is a specification.

In running the damper-chains from furnaces many practical difficulties are encountered because of overhead beams, chimneys, pillars, jutting corners, &c., so that much expense and labor and often considerable ingenuity are required to get the proper alinement and free-running directness of the chains from the dampers, and accordingly to obviate most of these difficulties I have provided a special self-alining chain-carrier in the form of a base-plate adapted to be strongly secured in any position to a beam, wall, or ceiling and carrying a swiveled arm so shaped and located as to give the strongest resistance in combination with the base-plate, said arm at its free end having a pulley located at one side of the pivotal axis of the arm, and in connection with the central or meeting point of the several chains a third pulley is located in vertical alinement with two of these "tangential" pulleys, as I term them, all as will be more specifically stated in the following description, referring to the accompanying drawings. The result is that the ingenuity, labor, and expense above referred to become no longer necessary in order to meet awkward or special situations, as no matter what the directions or situation may be my special apparatus receives the chain from any direction and automatically alines itself thereto and to the direction in which the chain or chains are led, all with precision, strength, and permanence.

In the drawings, in which I have illustrated the construction and use of my invention, Figure 1 is a view in side elevation of one embodiment of the invention as adapted to a distributing center in damper-chain work. Fig. 2 shows a detail in bottom plan. Fig. 3 is a side elevation of a simple form of the device. Fig. 4 is a perspective view of a further detail. Fig. 5 is a side elevation, or more properly a diagram, illustrating the adapt-

ability of my invention to different places and requirements in connection with furnace-dampers.

It will be understood, still using the same illustration of damper-work, that the strain brought by a chain upon a pulley is usually downward and laterally, and accordingly I have located the pulley *a*, referring to its simplest form, Fig. 3, at one end of a flat base-plate *a'*, so that the rearwardly-extending plate thereby receives and resists all strains to the best advantage, and also, as the direction of the lateral strain or pull of the chain is liable to vary, I increase the width of the base-plate *a'* rearwardly, making it triangular, as herein shown. The pulley *a* is journaled in the free end of a short curved arm *a²*, bifurcated to receive it, and the opposite or upper end of said arm *a²* is swiveled on a short stud or pivot post *a³*, and a reference to the drawings shows that said pivot-post *a³* is in a plane approximately tangential to the pulley, so that a chain passing vertically to the latter will be in substantial alinement with said pivot-post. This, in connection with the short compact construction-gives great strength and insures certainty of position. Also the above tangential arrangement brings the two pulleys, as indicated at *a⁴*, referring to the construction shown in Figs. 1 and 2, into proper relation to receive opposite chains *b b'* and transmit them together to a third chain *b²* for connecting the entire system to a common operating-stand *b⁴*, as will presently be explained. For such an arrangement I mount on the base-plate *a'* a long hanger *a⁵*, having a swiveled arm *a⁶* at its lower end, in which is journaled a pulley *a⁷*, swinging very nearly into vertical alinement with the stud *a³*, so that no matter what direction the chains *b b'* may come from the pendent pulley *a⁷* will always be in proper position to receive the common chain *b²* therefrom.

From the foregoing description the adaptability to all situations of my invention will be readily apparent.

In Fig. 4 I have indicated a draft-damper at *d* and a check-damper at *d'*, the chains *b b'* therefrom passing over opposite single-pulley devices to a central double-pulley device

and thence being united at b^5 and passing to a hanger-pulley a^7 and finally to the controlling-stand b^4 .

In Fig. 3 I have shown the hanger-pulley a^7 provided with its own base-plate a^8 for special uses.

As already intimated, I do not restrict my invention for use with damper-chains, as it is applicable to various situations and kinds of work, nor do I restrict myself in all respects to all the details above set forth, as will be evident from the following claims.

Having fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A device for damper-chains and the like, comprising a horizontal base-plate, from which projects perpendicularly a short pivot-post, a short curved arm swiveled about said post, and a pulley journaled in the free, outturned end of said arm and having the inner side of its periphery approximately in vertical alinement with said pivot-post.

2. A device for damper-chains and the like, comprising a base-plate having at one end a vertical pivot-post, the sides of said base-plate flaring from each other rearwardly from said

pivot-post for taking strains in all directions, a short laterally-extending arm swiveled to said post, and a pulley journaled in said arm. 30

3. A device for damper-chains and the like, comprising a base-plate, a short pivot-post depending therefrom, a plurality of short independently-swinging arms swiveled on said post, and a pulley journaled in the free end of each arm. 35

4. A device for damper-chains and the like, comprising a base-plate, a short pivot-post depending therefrom at one end, a plurality of curved arms swiveled on said post, a pulley journaled in each arm, a hanger depending from said base-plate adjacent said post, and a lateral arm and pulley on the lower end of said hanger, the outer peripheral edge of said last-mentioned pulley being approximately in vertical alinement with said short pivot-post. 45

In witness whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE H. TARLETON.

Witnesses:

GEO. H. MAXWELL,
JOHN E. PORTER.