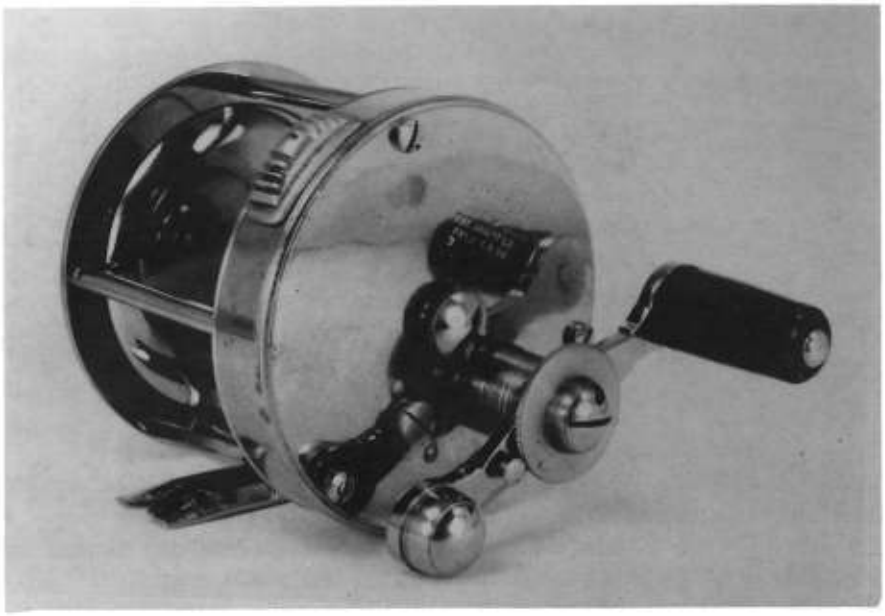
Julius vom Hofe 'N' Drag

by

Steven K. Vernon



Abbey & Imbrie reel. Note the round button on crank next to drag adjusting nut.

In 1908, Charles Frederick Holder, big game fisherman extraordinaire, lamented the lack of adequate drags on the fishing reels of the day:

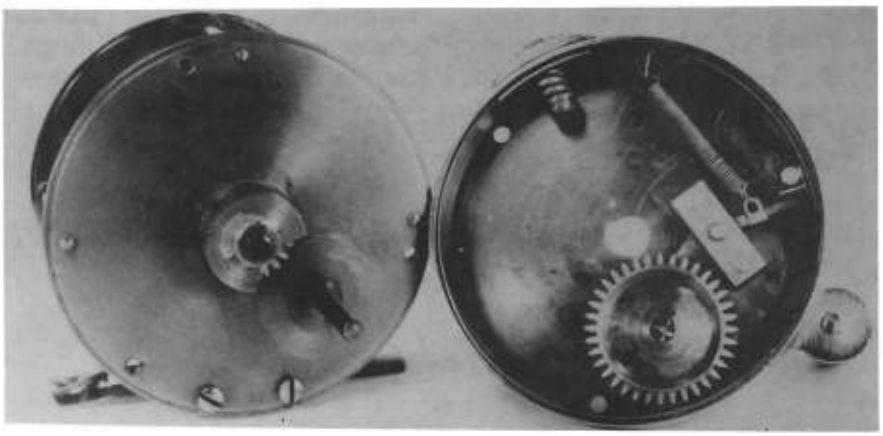
"I have found the thumb and upper brake sufficient for ordinary work, though I have often wished for something else when my line was melting away before a Texas tarpon or a Santa Catalina tuna, which apparently nothing could stop." [1]

At the time, Holder was fully aware that Edward vom Hofe's "patent internal drag" of 1902 was available on tarpon and tuna reels. He realized, however, that drag "pressure should be governed and tempered by intuition, and in this regulating of the brake...lies much of the skill." [2] We can surmise that Holder deemed vom Hofe's drag as deficient, presumably because it required a special wrench for adjustment. It is hard to imagine how anyone could make such adjustments while fighting a heavy fish, even if the wrench was not lying on a table at home or plummeting toward the ocean floor.

Help was on its way. Within a few years, Julius vom Hofe, Jr.'s,"B-Ocean" reel would appear, equipped with the first version of the modern star drag. Designed through the collaborative effort of several of Holder's fellow members of the Santa Catalina Island Tuna Club, the reel combined a recently patented, non-demeshing freespool clutch with two drags: a rear-mounted "moderate" drag and the crankshaft-mounted star drag with its "Pilot" wheel. The rear drag and clutch were the subjects of a patent granted to vom Hofe on March 21, 1911. The star drag was an improvement of Edward vom Hofe's design and included a major innovation -- an internal anti-reverse mechanism for the crank.

Like most inventions, the star drag did not arise full-blown from its inventors' collective mind. The first crankshaft-mounted drag had been patented in 1864 and was adjusted by the crank screw. Edward vom Hofe's drag required an externally mounted, retractable pin to prevent the crank from spinning in reverse. George Blackburn's 1907 drag employed a retractable metal bar for the same purpose. Several drag handles, including Francis Rabbeth's famous "Governor," were available before 1911 and could be retro-fitted to reels.

Recently, I examined a vom Hofe product, an Abbey & Imbrie reel, that may represent a "missing link" in the evolution of the star drag. The reel, 2-1/2" in diameter, is a 2:1 multiplier made of plated brass and is suitable for light trolling. The head cap is stamped with the Abbey & Imbrie name and the dates of two patents for adjustable pivots. The "586" stamped on the foot is,



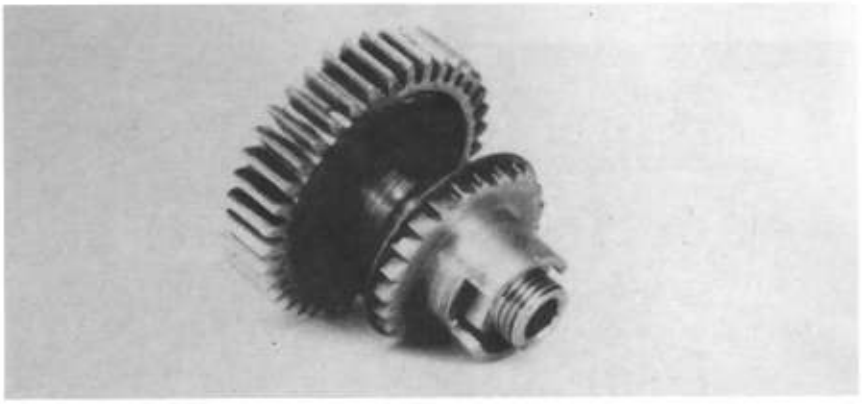
The headplate and head cap mounted machinery. The rim button slides a curved spring that lies against the inside of the head cap rim. When it moves, the pawl is pivoted. The ratchet wheel is behind the main gear.

presumably, a serial number. Like the heavily advertised Abbey & Imbrie "Compensating Reels," the reel employs the vom Hofe 1889 pivot with slotted cup washer on the tailplate. The conical front pivot, the subject of an 1882 patent and adjustable by a screwdriver, is protected by an oil cap. A sliding click button is mounted on the tailplate.

The remarkable feature of this reel is its automatic, adjustable drag, activated by a sliding button on the rim of the head cap. When the button is slid down, the spool (and crank) spin smoothly in either direction. When the button is slid up, the reel can be cranked without resistance, but the light clicking of a pawl and ratchet can be heard. When the spool is cranked in reverse, however, it encounters significant frictional resistance. The knurled crank nut adjusts the frictional tension. There is no anti-reverse feature, so the spool can not be spun separately from the crank.

The drag is produced by compression of a couple of washers between the main gear and the face of a ratchet wheel, which has an integral collar that slides on the crankshaft. A pawl, pivoted against the wheel by the rim button, prevents the wheel from rotating when the spool turns in reverse. The adjusting nut merely presses the wheel against the drag washers. In short, the mechanism is a primitive "star drag" adjusted by a nut that is not star-shaped.

Lending a touch of mystery to the Abbey & Imbrie reel is an inscription inside the head cap: a name and "Oct. 10th, 09."



The drag components. The ratchet wheel is pressed against the drag washers by the adjusting nut.

Whether the name is that of the owner or the machinist who produced the reel is immaterial. The date indicates that vom Hofe produced a crankshaft-mounted friction drag adjustable by a knurled nut before he applied for the patent whose date is stamped on the "B-Ocean" pilot wheel. The application for the patent, which described the clutch and rear-mounted drag, was filed on September 15, 1910.

I believe that the drag featured on the Abbey & Imbrie reel was the result of an early attempt by Julius vom Hofe to construct a drag that could be adjusted easily and externally. The pawl-and-ratchet operating mechanism had been in use for some time. In 1892, William King had patented a simple pawl and ratchet that could operate either a drag or click "only when the line is drawn from the reel." The patent had been assigned to Charles F. Imbrie, and the click design had been used in an Abbey & Imbrie fly reel built by vom Hofe. It is clear that vom Hofe combined the mechanism with Edward's 1902 drag to provide uni-directional drag in a multiplying reel.

The use of the pawl and ratchet in such contexts was not restricted to Abbey & Imbrie reels, of course. Several inventors had employed the device for their own innovative reels. However, other reelmakers argued, during the first decade of the century, that the overrunning clutch (used in the "Liberty Bell" reels, for example) was a superior means for controlling a uni-directional function. Therefore, the decision to employ the simple ratchet mechanism for a drag was not, at the time, as trivial or obvious as hindsight might suggest.

Apparently, vom Hofe's combination was deemed successful, and he would use the pawl and ratchet frequently for clutches and drags in his later reels, including those of his 1911 patents. Thus, the Abbey & Imbrie reel was an immediate predecessor of the modern star drag.

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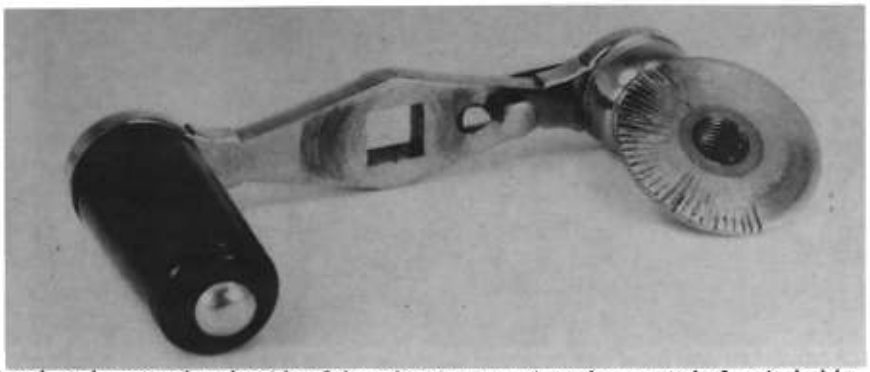

Crank and grooved underside of the adjusting nut. A wedge on end of a pin holds nut in position when it pops into one of the grooves. Button on crank disengages the pin. Button and pin are mounted on a short flat spring behind the crank.

1. C. F. Holder, *Big Game at Sea* (N. Y.: The Outing Publishing Co., 1908), pp. 109-110. Upper brake referred to squeezing the line against a rubber pad strapped to the rod.
2. ibid., p. 116.