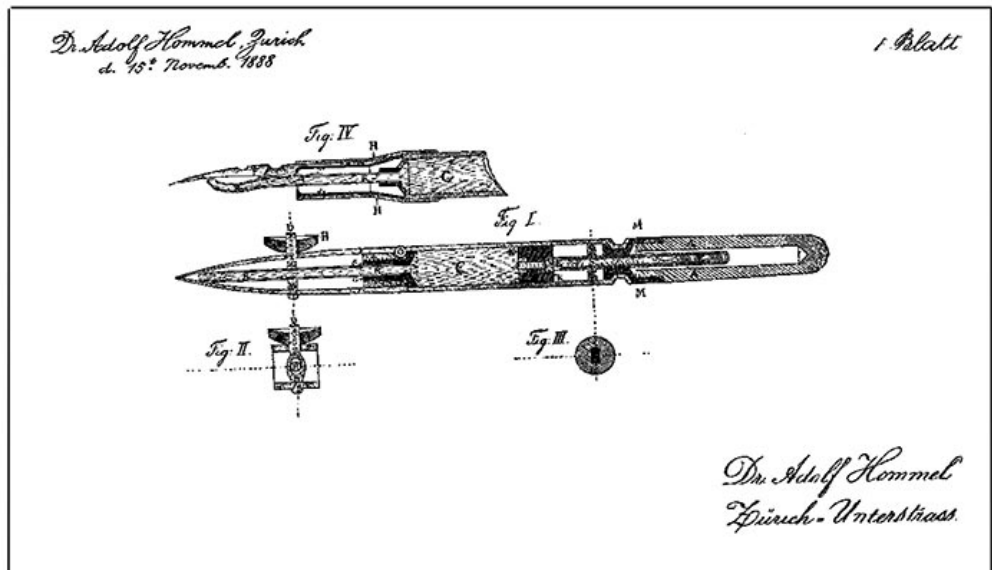




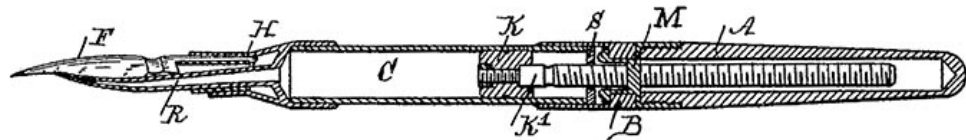
The Meteor Pen and Its Descendants

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On January 29, 1889, Adolf Hommel, M.D., of Zurich, Switzerland, received Swiss Patent № [188](#), of which the drawings are shown here, to protect his design for a piston-filling reservoir pen. Figure I illustrates a ruling pen for drafting or drawing. Figure III shows a pen fitted with a steel dip nib. The wasp-waisted constriction between the barrel and the elongated piston knob reflects the final production configuration:



Exactly seven weeks earlier, on December 11, 1888, he had received U.S. Patent № [394,183](#), covering the same design. Shown here is the single unnumbered figure in that patent; the ruling pen was not included:



Adolf Friedrich Hommel was born on April 6, 1851, in Chemnitz, Germany. After training for a commercial career, he worked in Russia for a few years. Resettling in Switzerland, he took up the study of medicine at the University of Zurich in 1880, matriculating in 1884, earning his doctorate in 1886, and practicing for some years thereafter. In 1890 he founded Nicolay & Company to produce and distribute Haematogen, a drug he had developed to stimulate blood production. In 1892 he founded a branch of Nicolay in Hanau, and in 1908 he established Hommel's Haematogen Corporation. With his substantial earnings, he bought villas in Zurich and on Lake Lucerne, amassing a remarkable art collection and a stake in Turicum, a Swiss automobile manufacturer. He sold his art collection in 1909 and moved to Wiesbaden, Germany, where he died at the age of 62 on December 12, 1913.

Hommel's pen was not the first to use a piston. Piston-filling pens, in which a piston moves forward to eject air and backward to suck in ink, appear to date to the 1850s. The earliest patent I have found for a piston-filling fountain pen is U.S. Patent № [12,301](#), issued to Newell A. Prince on January 23, 1855. Today, however, we differentiate between a syringe-like "pull" filler like the Prince Protean, in which the writer pushes and pulls the piston shaft manually, and a mechanically operated piston filler like Hommel's, which contains a screw mechanism to operate the piston when the writer turns a knob.

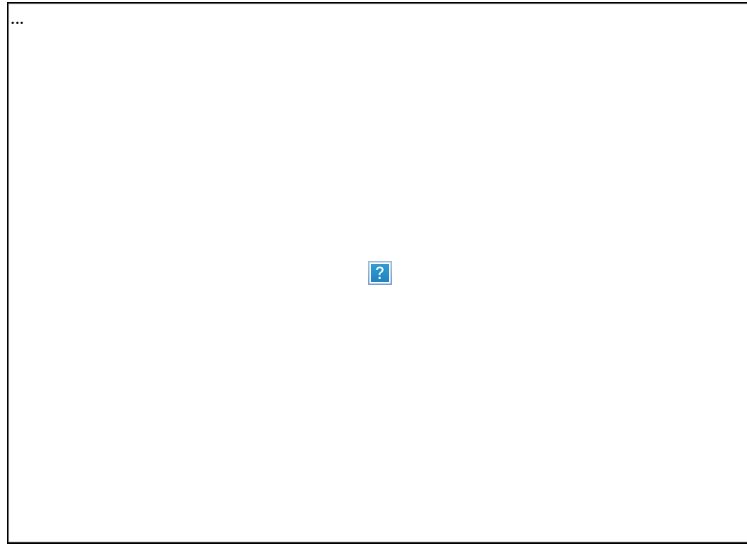
Because it did not provide a continuous flow of ink, however, Hommel's pen was not a true fountain pen. It featured a small tube projecting from the forward end of the reservoir and curved upward to touch the underside of the nib. To write, the user turned the piston knob counterclockwise to force a drop of ink down through the tube and onto the nib. In essence, it was still a dip pen, improved in that it now carried a supply of ink within its barrel.

The manufacture of the pen was in train before Hommel received his patents. On June 30, 1888, the Swiss *Official Gazette of Commerce* noted the following:^[1]

June 30th. Johann Koch of Hanau, in Enge, Dr. Adolf Hommel of Hottingen, in Unterstrass, Johann Conrad Kohl of Hanau, in Enge,

and Joh. Heinrich Krahforst of Munich, in Zurich, have entered into a limited partnership under the company name of Johann Koch & Co., beginning on June 15, 1888, in Aussersihl. Unlimited partners are: Johann Koch and Adolf Hommel; Limited partners are: Johann Conrad Kuhl and Joh. Heinrich Krahforat, each in the amount of fifteen thousand francs. Fabrication of the Meteor pen^[2] (patent). Josephstrasse, Industrial Quarter.

Advertising soon appeared. This French-language ad was published in an 1889 issue of *Nebelspalter* ("Fog Splitter"), a Swiss magazine of humor and satire:



Being a doctor, not an engineer, Hommel did not specify the material of which his pen should be made. Koch & Co. chose metal for the barrel, and that proved an unfortunate decision, as they explained an 1889 ad. The new second model, they said, was made of celluloid (under the trade name Lithoid). This made the pen lighter and easier to use, and it also eliminated the problem of ink that was ruined by contact with the metal after an extended period of disuse. The second model could also be unscrewed in the middle, making it much easier to flush the reservoir. Shown here is a much later Meteor of uncertain date, made entirely of celluloid. This pen was made after the design was changed so that disassembly in the middle was no longer possible, a change that significantly reduced the cost of the pen.



Images © Daniel C. Holzer & Richard F. Binder

Word of the Meteor got around, as can be seen from this item in the July-September 1889 edition of the *Jahrbücher für die deutsche Armee und Marine* (German Army and Navy Yearbook), by Lieutenant Colonel (retired) E. Schnackenburg.^[3]

An extremely practical invention for all writing, especially in the field and on maneuvers, especially for adjutants and sergeants, is the Meteor fountain pen invented by Joh.Koch & Co. of Zurich. It never fails when properly handled, and writes immediately after months of non-use. Any free-flowing ink (except iron-gall ink) can be used. Everyone will know what advantage it gives to be able to produce messages, orders, and the like outside the office in ink instead of a pencil. We can therefore hope that the Koch & Komp company's invention will be widely used, because it does indeed deserve a certain demonstrable military interest. The Meteor fountain pen is available from the officers' association at a price of 2 marks 40 pfennigs.

Very shortly after its formation, possibly within a year, Koch & Co. was converted from a limited partnership into a stock corporation.

The following advertisement for the Meteor pen appeared in *Nebelspalter* in 1890:^[4]

I am the gloomy crier
And heard with horror
How to get to Bellinzona

Ich bin der Düsteler Schreier
 Und hab' mit Entsetzen gehört,
 Wie man in Bellinzona
 Das Rathen der Räthe stört.

Selbst Tintengefäße sollen
 Zum Fliegen sich richten ein
 Und in ihrem Fluge gesonnen
 An Köpfe zu pütschen sein.

Dem könnte man leichtlich helfen,
 Werit die Tintenübel nur weg,
 Die Meteorfüllfederhalter
 Verhindern solch bösslichen Zweck.



The advice of the council interferes.

Even ink pots should
 Set up to fly
 And minded in their flight
 To be ready for heads.

One could easily help that
 Just pull away the ink pots,
 The Meteor fountain pen
 Prevents such wicked purpose.

For Christmas 1890, Koch & Co. placed this half-page advertisement in the newspaper *Beiblatt der Fliegenden Blätter*, December 15, 1890. The top line, *Nützliches Weihnachtsgeschenk*, reads "Useful Christmas Gift," and the boxed line, *Kein Tintenfaß Mehr*, proclaims "No More Inkwell":

— Nützliches Weihnachtsgeschenk!! —



Links drehen!
Tinte-Austreibung

Rechts drehen!
Tinte-Ansaugung

Kein Tintenfaß mehr!

beim Gebrauch unseres

Meteor-Füllfederhalters.

Patentirt in allen Staaten. (Dr. Hommel's Patente.)

— Niemaliges Versagen! —

Auch nach monatelangem Nichtgebrauch sofortige Schreibfertigkeit!
Zur Füllung des Halters kein Hilfsmittel nothwendig!
Kein Beschmutzen des Halters, keine satzige Tinte mehr!
 Jede courante Feder und jede gute Tinte kann verwendet werden.
 Zu haben in allen besseren Schreibmaterialienhandlungen im In- und Auslande!

Preis in eleganter Ausstattung: Hartgummi und Nickel Mk. 3.50, in ganz Lithoid Mk. 4.50, in Goldplattirung Mk. 6.—, feinere Sorten höher.

Man verlange ausdrücklich
Meteor-Füllfederhalter, Dr. Hommel's Patent.
Actiengesellschaft für Kleinmechanik, Aussersihl-Zürich (Schweiz).



Rechtsdrehen!

Anfüllung des Halters



Geschlossen

Information about the Meteor pen disappears from the record in 1891, but the design did not fall out of use. Into the mid-1920s, a variety of cheap Austrian-made piston-filling pens made to Hommel's design were sold under names such as Kosmos, Standard, Victoria, Yankee, and others. In the United States, they appeared principally in the classified advertising sections of magazines such as *Popular Mechanics*, at prices ranging from 25¢ to \$1.00. These pens were often fitted with untipped brass nibs and were made of a celluloid tube heat-swaged at the back end to hold the mechanism in place, in the same manner as with the Meteor pen shown above. By the mid-1920s, the \$1.00 versions were vastly overpriced given the availability of true self-filling dollar fountain pens such as Ingersoll's. Shown here are a 25¢ Manos pen (upper) and a \$1.00 example branded **"VICTORIA" Self-Filling Fountain Pen** (lower).



Remembering the Forgotten

Adolf Hommel's pen presents a conundrum. It came into being just at the time when practical continuous-flow fountain pens were appearing from companies such as the L.E. Waterman Company and the Parker Pen Company, and its piston-driven ink delivery system was out of step with the times. Yet it embodied two remarkably innovative features that became widely accepted and used in the next 50 years:

- Its filling system, which featured a non-rotating single-action screw-driven piston, was the progenitor of a line that culminated in the differential system invented by Theodor Kovács (U.S. Patent № [1,706,616](#)) and implemented by Pelikan beginning in 1929, and of the single-acting system invented by Andreas Beinenstein (U.S. Patent № [1,902,809](#)) and implemented in 1931 by Conklin.
- Its use of celluloid as the body material in a reservoir-based pen was a major innovation that seems to have been almost completely ignored for 30 years. In about 1920, Springfield, Massachusetts-based LeBoeuf began making pens using celluloid tubes in a process developed by Frank LeBoeuf (U.S. Patent № [1,302,935](#)). LeBoeuf was a small regional manufacturer, not able to exert a wide-ranging influence on the industry; but in 1924, Sheaffer, one of the Big Four, introduced Lifetime pens made of Radite, Sheaffer's trade name for DuPont celluloid. After that, celluloid took off, replacing hard rubber within a decade.

Despite the technological advances in his pen, Hommel (and his company) fell victim to the all-too-common misstep of being first across the line. When his patent expired, the design of the Meteor pen fell into the hands of copy artists who appear to have made a good living from it; but the technology advanced, and as so often happens, the beneficiaries of his invention were awarded the laurels while the real innovator faded away and was almost lost in the mists of time

Notes:

1. Author's translation, based on result from Google Translate [↕](#)
2. The original announcement described the product as the *Meteorfeiler*. That did not make sense, and the error was corrected to *Meteorfeder* a few days later. [↕](#)
3. Author's translation, based on result from Google Translate [↕](#)
4. Author's translation, based on result from Google Translate [↕](#)

The information in this article is as accurate as possible, but you should not take it as absolutely authoritative or complete. If you have additions or corrections to this page, please consider [sharing them with us](#) to improve the accuracy of our information. My thanks to Daniel Holzer, who brought Adolf Hommel and his pen to my attention and provided much of the information, and some of the images, that I have used in this article.