
CHAPTER 5

The Expansion of Scientific Publishing (1919–1932)

When World War I ended the mark had only half the purchasing power it had in 1914. The result was a rise in wages and materials and thus also in production costs of books. In 1917 publishers had introduced a price supplement. Springer-Verlag increased its prices for books published before July 1, 1917 by 20 % for soft-cover and by 30 % for hard-cover copies. There were further price rises in 1918, and in 1919 the firm doubled the list-prices of books published before the end of 1917, and increased the prices for those published in 1918 by 50 %. This was a moderate amount in the face of salaries having “more than tripled,” as Springer told one of his authors, Max Born, on January 12, 1920. Some booksellers had increased their prices even further in the spring of 1919, causing strong opposition from the *Börsenverein* and the publishers. *The Beginnings of Inflation*

However, the rapidly worsening inflation after the end of the war could not be met in the long run merely by percentage increases. Retail booksellers complained that the book prices, which always lagged behind, no longer covered their costs; publishers suffered because invoices were paid only when the value of money had fallen, an accusation which printers also made about publishers. Since prices were no longer in step with the exchange rate of the mark, there followed an accelerated loss of stock. This in turn resulted in production costs of new publications and reprints not being covered by sales revenue. As the publisher Wilhelm Ruprecht wrote in his memoirs “It was noted abroad that with the fall in the value of the mark entire libraries could be bought for paltry sums of pounds or dollars” [RUPRECHT: 257].

The Councils of the *Börsenverein* and of the *Deutsche Verlegerverein* (German Publishers’ Association) decided on September 8, 1922 that each publisher was to fix a “basic number” for books in stock. This number was to serve as something like the gold standard. It was to be multiplied by a “key number” to *The Key Number*

calculate the list price on the day. On the day of the decision the basic number was 60. With new books the bookshop calculated the price to be charged by using the costs charged on that day by the printers. The basic number was obtained by dividing this figure by the key number. Depending on the key number, which changed at short intervals, multiplication gave the bookshop price on that day. However, devaluation of the mark proceeded more rapidly than the key number could be raised. As a result, the calculated bookshop price was already outdated by the time it was fixed.

A new key number was announced in accordance with the change in inflation. It had increased tenfold by December 27, 1922. In other words, each book on that date cost 600 times the price before the war. And so it continued [WIDMANN (1):160]:

June 21, 1923:	Key number	6300
August 11, 1923:	”	300000
September 7, 1923:	”	2400000
September 11, 1923:	”	6000000
November 5, 1923:	”	100 thousand million

When the “Rentenmark” was introduced on November 20, 1923 the nightmare was over: on that day one rentenmark equalled one thousand million papermark.

Prices in Other Currencies

Das Errechnen der Auslandspreise!

(Gültig vom 13. Juni 1923 an)

Für je 1 Schweizer Franken Auslandspreis:

Amerika	Dollar	0,20
Argentinien	Pesos (Papier)	0,35
Belgien	Francs	3,—
Brasilien	Milreis (Mrs.)	1,20
Bulgarien	Lewa	12,—
Chile	Peso (Papier)	1,10
Dänemark	Kronen	0,90
Finnland	Marka	5,—
Frankreich	Francs	2,50
Griechenland	Francs	2,50
Großbritannien	Pence	10
Holland	Gulden	0,50
Italien	Lire	3,—
Japan	Pence	10
Jugoslawien	Dinar	10,—
Luxemburg	Francs	3,—
Mexico	Dollar (amer.)	0,20
Norwegen	Krone	1,—
Osterreich	Kronen	8000,—
Portugal	Escudo	3,—
Rumänien	Lei	30,—
Schweden	Kronen	0,70
Spanien	Peseta	1,—
Tschecho-Slowakei	Kronen	4,50

To counteract book trade products being sold out to buyers from abroad the *Börsenverein* promulgated a “Sales Regulation for Deliveries to Foreign Countries,” effective from February 22, 1922. After this date export delivery surcharges of between 100 % and 200 % – depending on the currency stability of the recipient’s country – were to be added. But Springer took advantage of an exceptional permission to make its calculations in a foreign currency. This ensured stable foreign prices and at least partly counterbalanced the sinking domestic prices.

From April 1922 Springer-Verlag conducted foreign business in relation to the Swiss franc, and from July 1923 to the dollar. Although exports were under ministerial supervision, these controls were apparently not very strict. In certain circumstances it was possible to have a credit on a foreign account. In any case, Springer-Verlag seems to have had access to foreign currency accounts, if only to buy all important foreign journals

Zur Beachtung

Ich habe seit Ende September dieses Jahres für meine sämtlichen Werke das System der

Grundzahlen

eingeführt.

Für die in diesem Verzeichnis aufgeführten Werke ist in der ersten Rubrik die Grundzahl für geheftete, in der zweiten für gebundene oder kartonierte Werke angegeben. Die dritte und vierte Rubrik enthalten die Verkaufspreise für das Ausland in Schweizer Franken.

Zur Berechnung des Verkaufspreises für das Inland ist die Grundzahl mit dem jeweils gültigen

Umrechnungsschlüssel

zu vervielfachen. Das Ergebnis stellt den Verkaufspreis dar.

Lieferungen nach dem hoch- oder mittelvalutigen Ausland werden in Auslandswährung berechnet. Die Umrechnung der in diesem Verzeichnis angegebenen Schweizer Franken erfolgt nach dem Verhältnis

100 Schweizer Franken =

Amerika (Verein. Staat. v. Nordam.) Dollar	20.—	Holland..... Gulden	50.—
Argentinien..... Pesos (Papier)	30.—	Italien..... Lire	250.—
Belgien..... Francs	200.—	Japan..... Schillinge	85.—
Brasilien..... Milreis (Mrs.)	100.—	Jugoslavien..... Dinar	550.—
Bulgarien..... Lewa	1400.—	Luxemburg..... Francs	200.—
Chile..... Pesos (Papier)	100.—	Mexiko..... Dollar (amer.)	20.—
Dänemark..... Kronen	90.—	Norwegen..... Kronen	100.—
Finland..... Marka	400.—	Portugal..... Milreis (port.)	300.—
Frankreich..... Francs	200.—	Rumänien..... Leu	1500.—
Griechenland..... Drachmen	400.—	Schweden..... Kronen	70.—
Großbritannien... Schillinge	85.—	Spanien..... Peseten	100.—
		Tschechoslovakei Kronen	300.—

Ausnahmen sind dadurch gekennzeichnet, daß die Verkaufspreise in deutscher oder fremder Währung vor die erste Linie gesetzt sind.

Für alle vor 1912 erschienenen, in diesem Verzeichnis nicht enthaltenen Werke sind die in meinem Verlagskatalog 1842—1911 (abgeschlossen Dezember 1911) aufgeführten Ladenpreise der betr. Werke als Grundzahlen zu betrachten.

Berlin, Anfang November 1922

Julius Springer

231, 232 In November 1922 a new Springer-Verlag catalogue came out. The page on the left gives instructions on how to calculate foreign currency prices from catalogue prices given in Swiss francs, valid from June 13, 1923 (see p. 238), when most foreign currencies had been devalued. For this reason all export invoices contained an added currency charge. After July the US dollar served as the standard for export prices. The page on the right gives instruction on how to calculate the foreign currency price of a book from the listed (Swiss francs) prices in the catalogue.

needed for its medical central review journals (*Zentralblätter*).

Even after the "key number" had been introduced in September 1922, Springer-Verlag – like other publishers [RUPRECHT: 261] – invoiced all its export sales with a 25 % surcharge to compensate for the rise in prices that had now also occurred in other countries. But these surcharges were not unchallenged. As Ferdinand Sauerbruch wrote (on June 15, 1922) to Springer after a trip to Sweden: "It is repeatedly said that the few millions which Germany receives by these surcharges mean nothing

233 (Bottom) *Friedrich Schmidt-Ott (1860–1956), Prussian Minister of Culture 1917/18. He strongly supported the establishment and growth of the Notgemeinschaft der Deutschen Wissenschaft (Emergency Association of German Science), which provided funds to both individual scientists and scientific institutions at a time when most governmental budgets had been severely cut. He was the Association's chairman from 1920 to 1934.*

compared with the loss of sympathy and cultural influence through the decline of the German book.” A few days later, on June 19, 1922, Ferdinand replied to him:

The problem on which you have touched is the most difficult one at present for the German scientific book trade. But it not so easily soluble as you imagine. In the end, the leading heads of the German book trade are not all limited people without a wider view who must be pushed onto the right path by outsiders. German prices are justified as long as they are no higher than, say, 25 % above the peacetime level. In the last few months the domestic prices have in fact come closer to those on the world market, also in the graphic trade. However, as long as there still are significant differences between production prices in Germany and those of the world market, foreign countries must bear the costs in the interest of the domestic market, up to the limit which I have mentioned.

There were also other problems about book exports. The Allied Nations had, for example, instructed their importers to subtract 26 % from German invoices as reparation payments. Springer-Verlag refused to have reparation payments applied to private enterprises and in such cases supplied only against advance full cash payment (Letter to Kurt Koffka of March 19, 1924).

On the Position of Authors

Even years after the end of the war, German science was refused communication with foreign organisations.⁴⁷ Membership of German scholars in foreign societies had ceased and their participation in international congresses in formerly enemy countries was boycotted [LUBARSCH: 366]. Even the use of the German language by foreigners, for whom German had been the language of their subject (e. g. in The Netherlands and Scandinavia), was forbidden. On the other hand, foreign literature was nearly unobtainable in Germany because of the currency situation.

There was no lack of attempts to ease the difficulties [SCHMIDT-OTT (1): 9 ff.]. Max Born reported the following plan to Springer on January 8, 1920: “The proposal has been made by outstanding persons in university circles that scientific journals should no longer be sent freely abroad, but that a central office should be established which releases the journals only in exchange for foreign ones of equal status.” The low value of the German currency was making it completely impossible for German scholars and institutions to continue obtaining foreign journals. But the proposal had been “rejected out of hand” by the *Börsenverein*. Springer regretted this in his reply to Born: “I



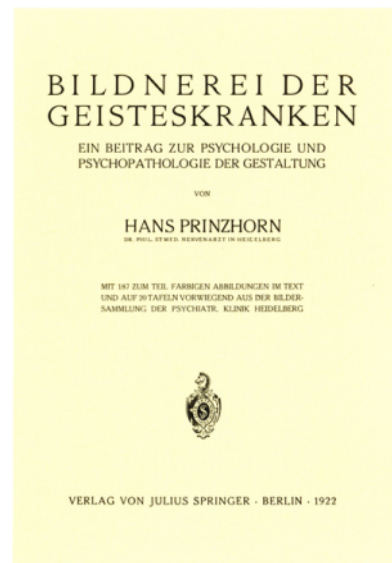
think it is wrong that the *Börsenverein* stresses publishing interests one-sidedly. It should have said to itself that without the sciences and without the scientists there would be no scientific publisher, and it should have made the attempt to solve the problem.” However, Springer believed that the technical organisation of such a proposal would have been difficult, because the government would have had to obtain the approval of the victorious powers to establish such a central organisation. Their agreement was very much to be doubted.

A nearly insoluble problem was the fixing and settlement of royalties. Page fees, paid after publication of a book, were valueless within a short time. Sharing in the profits, as had been favoured so far by Springer-Verlag, was not only very time-consuming but only rarely brought about positive results, because often the revenues were worth only a fraction of the amounts that had been invoiced. Payment of a percentage of the selling price was unlikely to produce more favourable results for authors. It was only after the inflation that they would obtain some compensation for their work: during the inflationary period there was no way of providing them with an even approximately fair return for their work. For publishers settling accounts involved an enormous increase in work, because payment to authors had to be calculated for books sold after each rise in price. From September 1922 onward this moment came with the fixing of a new key number.

To give an example, calculation of the sales of Hans Prinzhorn’s *Bildnerlei der Geisteskranken* (Pictures by Mentally Ill Patients) gave the following listing (all prices in mark):

945 Copies		à	80.10	=	75694.50
224	”	à	160.20	=	35884.80
95	”	Key number	60 per copy	à	306.— = 29070.—
28	”	”	80	”	” à 408.— = 11424.—
30	”	”	110	”	” à 561.— = 16830.—
34	”	”	160	”	” à 816.— = 27744.—
124	”	”	210	”	” à 1071.— = 132804.—
96	”	”	300	”	” à 1530.— = 146880.—
33	”	”	400	”	” à 2040.— = 67320.—

Additional amounts from sales in a foreign
 currency were also credited at 15% = 96856.40
 640507.70



234 Hans Prinzhorn’s book, *Bildnerlei der Geisteskranken* (Pictorial Creations by the Mentally Ill: A contribution to the psychology and psychopathology of artistic design) was so successful that it had to be reprinted after only a few months. However, interest then faded away rapidly so that in 1931 many unsold copies had to be pulped. By the end of the 1960s the book was much in demand again and there were several reprints. An English edition was published by Springer in 1972.

On the day of calculation, May 9, 1923, the royalty for 1609 copies still had a value of 90 goldmark. If this had been paid to Prinzhorn four weeks later he would have been paid only 34 mark.

It was customary for payments of copies sold to be made three months after the end of the calendar year. Since at that point earnings from the preceding year were only a fraction of the original value, authors expected at the height of the inflation to be paid at shorter intervals, at first quarterly and later even monthly. This made for a great deal of almost unmanageable additional work in calculating sales and royalties, as well as in correspondence and book keeping. In the end discussions about the fairest way of calculating royalties and their payment took up a significant part of the publisher's own time.

At the Peak of Inflation **I**nflation became quite unmanageable in the summer of 1923. On 1 June, the value of the mark was only 1/17,798 of its original level, two months later 1/261,905 and at the end of August (in 30 days!) it had fallen again tenfold. The “Emergency Association of German Science” was able to finance only works and journal volumes already under way, the subsidy consisting of 10–80 % of production costs, depending on print-run. “The daily press under the heading of ‘the end of the scientific book’ dealt at length with the growing emergency, the Publishers Associations in Stuttgart, Munich and Silesia having decided to stop production for the time being, in conformity with a large number of publishers in Leipzig and Berlin” [SCHMIDT-OTT (1): 12]. Ferdinand Springer, who had always refused to take subsidies from the “Emergency Association”⁴⁸, assured his author Max Born on August 23, 1923 that even in this dire situation he would continue unaltered with his various enterprises, especially journals. “I take the view that we must carry on even now, so long as it is at all possible, and that the ever falling mark will always restore our export capacity.”

In 1913 Springer-Verlag's annual book production was 379 titles. After the recession during the war it had, with 342 titles in 1920, surpassed the pre-war total, and in 1922 had gone up to 396 [SCHÖNROCK].⁴⁹ Other German scientific publishers had, during the same period, reduced their production by at least 60 % of pre-war level. How was it possible that Springer-Verlag was able to expand during those inflationary times?



235 Ferdinand Springer (in 1924). His expansive publishing policy after World War I had aroused much surprise. “When ultimately the mark had been reconstituted, it became clear that our firm had gained a lead which the others could hardly make up” [LB].

Looking back, Springer commented in his talk to the Rotary Club about his policy of expansion during the inflation:

I had recognised that it was wrong to reckon with the return of “normal conditions.” I wanted, I had to keep my creative urge active, however difficult or even reckless this seemed. My colleagues shook their heads at my actions and prophesied catastrophe. But developments proved me right. It was quite wrong to put one’s hands in one’s lap and close down the service to science. When the market was newly constituted it was evident that our firm had gained a lead, which the others could hardly catch up with.

The drastic fall in production during the war had led to a decrease in the size of journals and in the frequency of their publication, even of those that were vital to industry. However, the idea of setting up their own publishing companies had much earlier roots. The purpose was to structure journals according to

Societies as Publishers

a society's own ideas and (in many instances probably the strongest argument) avoid having to share the not inconsiderable advertising revenue with publishers. A certain attention-seeking desire among some society officials may sometimes also have played a part. The risk seemed to be low, because sales would largely be secured by members' subscriptions. As a result, in 1921 Springer-Verlag lost the *Zeitschrift des Vereines Deutscher Ingenieure* (Journal of the Association of German Engineers) in its 65th year. (The publishing company for the journal was not founded until January 6, 1923.) Thus ended 40 years of mutually profitable collaboration. A few years later Fritz Springer wrote that it had been clear to his firm that one day the Association would want to be its own journal publisher. "It was important to delay this moment as long as possible, and this we succeeded in doing." [FS: 26].

Other groups also set up their own publishing firms at this time. In 1918 the Association for Mining Interests founded the publishing company *Glückauf* (Good Luck – the traditional miners' greeting) in Essen, while the *Verein Deutscher Chemiker* (Association of German Chemists), the *Deutsche Chemische Gesellschaft* (German Chemical Society) and the *Verein zur Wahrung der Interessen der chemischen Industrie* (Association for Guarding the Interests of the Chemical Industry) together established the Verlag Chemie [RUSKE (2): 17 ff.]. The Beuth Verlag was founded in Berlin in 1924, Giesserei-Verlag (Foundry Publisher) in 1927 in Düsseldorf, and the VDE-Verlag by the *Verband Deutscher Elektrotechniker* (Association of German Electrical Engineers). At first these publishing houses published almost exclusively their society's own journals, but soon aimed to bring out books as well. However, they frequently had rather unrealistic expectations of profits from their publishing activities, and many of the societies thought that the number of their members was enough to ensure cost-covering sales. While this was usually true of journals, it was erroneous in the case of books. The book trade was obviously not too keen to promote such publications, as a large proportion was sold direct to society members and at a reduced price. Many authors realised that their own interests were better served by commercial publishers, especially with respect to sales abroad.

Other scientific organisations also considered founding publishing units, but only those backed by financially strong enterprises succeeded, e. g. firms in iron, steel, coal and engine production, and the chemical industries. In these instances the

expected advertisements by large companies and contributions by the industry itself did indeed ensure profitability [SARKOWSKI (5): 61].

In April 1816 August Hirschwald (1774–1848) had opened a bookshop at Große Burgstraße 25 in Berlin and ten years later started publishing as well. Very early on he specialised in medicine and the natural sciences. The publishing house reached its zenith under his nephew Eduard Aber (1810–1899), who had taken over both parts of the firm, together with Hirschwald's son Ferdinand (1826–1899), on Hirschwald's death. Their authors included prominent representatives of the “Berlin School” of medicine: Karl Ferdinand von Graefe, Johann Friedrich von Dieffenbach, Ernst von Bergmann, Theodor Billroth, Felix Hoppe-Seyler, Bernhard von Langenbeck and, most important of all, Rudolf Virchow, founder of cellular pathology, to name but a few active during those years. The firm depended mainly on 12 journals, among them in particular five outstanding archival journals and the *Berliner klinische Wochenschrift* (Berlin Clinical Weekly).

After the death of both Eduard Aber and Ferdinand Hirschwald in 1899, Albert Aber (1842–1920), Eduard's son, took over the firm. But as a result of fiercely growing competition among medical publishers (Ferdinand Enke, F. C. W. Vogel, J. F. Bergmann, Gustav Fischer, S. Karger, Georg Thieme, Urban & Schwarzenberg and Springer) Aber was not able to maintain his firm's leading position. As a bookseller, too, he faced growing competition: in 1872 Oscar Rothacker had opened a bookshop specialising in medicine, which soon came to overshadow the Hirschwald bookshop.

During World War I, at the start of which Aber was already 72 years old, production of all but the most important journals almost ceased. When Aber died in 1920 no family member was interested in carrying on the business, and publishing house and bookshop were up for sale. In addition to Springer and the Leipzig publisher Johann Ambrosius Barth, others were interested in buying the firm. Springer was successful at a purchase price of about 175,000 mark (corresponding to about 100,000 goldmark) and took over on April 1, 1921.

Springer was particularly interested in the journals, almost all of which he continued to publish (see p. 255). Some of them were amalgamated with Springer journals of similar orientation, for

*Purchase of Hirschwald,
Publisher and Bookseller*

236 On March 31, 1921 Springer announced in the *Börsenblatt* the purchase of the August Hirschwald publishing company together with its bookshop Hirschwaldsche Buchhandlung, both of them remaining at Unter den Linden 68.

Hierdurch teile ich mit, dass die Inhaber meiner Firma, die Herren Ferdinand und Julius Springer, mit Wirkung vom 1. April 1921 die beiden Firmen

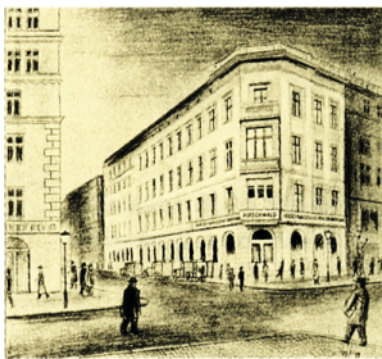
**August Hirschwald, Verlag und
Hirschwaldsche Buchhandlung**

ohne Aussenstände und Schulden käuflich übernommen haben. Die beiden Firmen werden unter den bisherigen Bezeichnungen in den alten Geschäftsräumen: Berlin NW. 7, Unter den Linden 68, weitergeführt.

Die Prokura des Herrn Max Costede bleibt bestehen. Ausserdem wurde für beide Firmen Herr Richard Krauss, der zugleich Prokurist der Firma Julius Springer bleibt, Prokura erteilt.

Berlin W. 9, den 31. März 1921.
Linkstr. 23/24.

Julius Springer.



237 Drawing of the corner office building Unter den Linden 68, enlarged through purchase of the adjoining building at Schadowstrasse 1a. It was destroyed by artillery bombardment in May 1945. In 1960 it was rebuilt to house the Ministry of Foreign Trade of the German Democratic Republic.

example the *Berliner klinische Wochenschrift* with Springer's *Therapeutische Halbmonatshefte* to become *Klinische Wochenschrift* (Clinical Weekly). The book list was integrated into the Springer programme, successful titles later going through new editions, e.g. *Handbuch der vergleichenden Anatomie der Haustiere* (Handbook of Comparative Anatomy of Domestic Animals) by Ellenberger and Baum, and *Handbuch der physiologisch- und pathologisch-chemischen Analyse* (Handbook of Physiological and Pathological-Chemical Analysis) by Felix Hoppe-Seyler.

The bookshop was continued under its prestigious name and the second-hand bookselling section revitalised. Its position at Unter den Linden 68 was a superb window for Springer-Verlag in the centre of Berlin. But new activities were to be started and it was essential to find the right man. Tönjes Lange (1889–1961) was engaged to run the bookshop. Lange had been an apprentice at the Rühl & Schlenker bookshop in Bremen; he had then worked for about three years at the respected Berlin University Bookshop Speyer & Peters at Unter den Linden 42, and had thus come to know the Hirschwald bookshop nearby. His training as a bookseller was concluded in Brussels where he worked for several years at the book import and export firm of Misch & Thron. After the war, from which he returned with the rank of captain, he took over the promotion department of August-Scherl-Verlag, which was already using modern marketing methods. Here he became familiar with building up, organising and making use of address lists. The work in a scientific and antiquarian bookshop he knew from his time with Speyer & Peters, and export business from his days in Brussels. He had thus had enough experience, at 33 years of age, to take over the Hirschwald bookshop and to give it a new orientation as a scientific mail-order bookshop.

While bookshop selling was not to be neglected, the new emphasis was clearly on mail-orders. The addresses of Springer authors provided the basis for the developing customer address list, soon to be supplemented by the addresses of members of numerous scientific societies in Germany and abroad. At the end of the 1920s this central card index contained 243,000 addresses of individuals, libraries and institutes, 52% abroad. As the index was also divided up into 1750 subjects and every customer was on average interested in five subjects, it in fact contained 1.2 million address cards. Promotion was undertaken with single-title leaflets, groups of titles, lists of new publica-



238 Map of the university quarter with hospitals and medical institutes just north of the river Spree, illustrating the excellent location of Hirschwald at Unter den Linden, also near other university buildings (arrow).

tions for libraries (*Hirschwald Anzeiger* [Advertiser]) and large subject catalogues. Topical offers were printed by the in-house printing unit.

Most of the Hirschwald foreign customers were in the USA (40%) and Great Britain (11%), so promotional material in English was introduced very soon. Mechanised accounting (the Eliot-Fisher System) had been installed in 1927, employing 60 women and men, when the firm held 30,000 domestic and 20,000 foreign accounts, as well as 150,000 accounts for customers who only placed orders occasionally. As the export side had many peculiar features, numerous libraries and institutes did all their ordering through Hirschwald. This was also true of those German customers who placed large orders for foreign books and journals.

Hirschwald was especially successful in the Soviet Union: it had a special section for this market, staffed largely by Russian emigrants. Its head, from St. Petersburg, had close, in some cases even personal, contacts with booksellers and librarians in his former homeland, until imports to the Soviet Union were centralised into Meshdunarodnaya Kniga (founded in 1923). Invoices for private customers were often paid by persons out-

239 Advertisement for the Hirschwald bookshop in the bilingual Deutsch-Russische Medizinische Zeitschrift (German-Russian Medical Journal), in 1925. It offered to send German, English and French medical literature to the Soviet Union, payment to be made to the Moscow State Bank for transfer to Germany.

HIRSCHWALDSCHES BUCHHANDLUNG
liefert nach d. UdSSR
 DEUTSCHE, ENGLISCHE UND FRANZÖSISCHE
MEDIZINISCHE LITERATUR

Unsere Prospekte und Kataloge senden wir kostenlos auf Wunsch. Durch unseren monatlich erscheinenden Hirschwald-Anzeiger unterrichten wir regelmässig ebenfalls kostenlos und unverbindlich über alle Neuerscheinungen auf sämtlichen Gebieten der Medizin und Naturwissenschaften. Mit jeder literarischen Auskunft stehen wir jederzeit zur Verfügung, Zahlungen sind an die Staatsbank in Moskau zu richten, zur weiteren Ueberweisung auf Konto Hirschwaldsche Buchhandlung bei der Garantie- und Kreditbank für den Osten Berlin NW 7.

HIRSCHWALDSCHES BUCHHANDLUNG
für Medizin, Naturwissenschaften und Mathematik
 BERLIN NW 7 Unter den Linden 68
Gegründet 1816

side Russia who were in this way supporting colleagues or relatives within the country.

Great stress was laid on an extensive journal service. In 1927 journal subscriptions were looked after by 32 members of staff. Supplying journals provides a long-term contact, which can also be used for book sales. The second-hand section, at first directed by Paul Schulze, and from 1928 until 1970 by Max Niederlechner, stocked volumes of non-current journals, 800,000 such volumes in 1929. These were of special interest to foreign libraries unable to obtain German scientific literature during the war.

Of course much promotional material and mailed leaflets go unheeded, because potential customers often prefer to order from their local bookshop. Although Hirschwald also sent out promotional material for 40 other publishers, every mailing was nonetheless valuable to Springer-Verlag.

When Springer took over the Hirschwald bookshop it had only 12 employees. Ten years later, there were 154, making it the largest scientific bookshop. In a prospectus in the 1920s it actually called itself “the largest scientific bookshop in the world.” Because the firm’s rapid expansion demanded an increase in space, the house next door, Schadowstrasse 1a, was acquired.

In 1933 Tönjes Lange was given full power of attorney in Springer-Verlag. He succeeded fearlessly, with circumspection and sometimes also with cunning, to guide the firm past all the

240 Window display at the Hirschwald bookshop on the occasion of the Reklame Schau (Advertising Fair) in 1929.



rocks placed in its way between 1933 and 1945. In 1941, on the orders of the national-socialist authorities, the Hirschwald bookshop had to change its name (see p. 372) and has since then been called Lange & Springer, a name which also ensures permanent recognition of Tönjes Lange's great service to the firm.

After the “Imperial and Royal” Austrian monarchy had been dissolved, Austrian publishers had lost significant sales territory and were in a deep crisis. Due to the consequences of war and the inflation their economic position was perhaps even worse than in Germany.

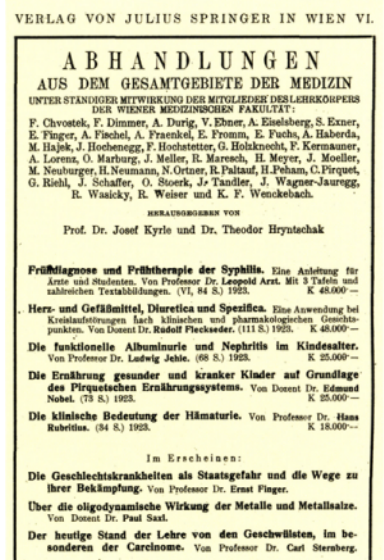
During a social gathering in the autumn of 1923, a Viennese surgeon, Prof. Anton Freiherr [Baron] von Eiselsberg (successor to Theodor Billroth) asked Ferdinand Springer whether he would consider publishing the *Wiener klinische Wochenschrift* (Viennese Clinical Weekly). The current publisher, Rikola-Verlag in Vienna, was having severe financial problems and it was hoped in Vienna that Springer-Verlag would bring renewed stability to the journal.

Springer agreed to take over the journal, but at the same time had to acquire Rikola-Verlag's small medical unit. This was the foundation of Springer-Verlag Wien. At about the same time the opportunity arose of a partnership with an Austrian scientific bookshop. Springer had known the son of Otto Šafář, its owner, since he had been a volunteer assistant with Springer-Verlag in Berlin in 1914. So it came about that in the same year (1924) the *Minerva* bookshop was established, absorbing the bookshop Lehmann & Wentzel, which specialised in engineering. Thus a firm base had been established from which the sales of Springer-Verlag's German publications could be promoted.

After a short occupancy at Amerlingstrasse 4, Springer-Verlag Wien moved in 1925 to a house in Schottengasse 4 where it had two upstairs floors, with the ground floor for the bookshop. This was the firm's headquarters until the house was destroyed in the last days of the Second World War. The managing director of the firm was Otto Lange (April 26, 1887–May 12, 1967), who transferred from Berlin where he had been with Springer-Verlag since 1910, and had been in charge of the “propaganda department” since 1920. Incidentally, it was on his recommendation that his younger brother Tönjes had been engaged in 1922 to take over the management of the Hirschwald bookshop (see above and p. 246).

The Establishment of a Publishing House in Vienna

241 *One of the first advertisements of the Vienna Springer-Verlag for its series Abhandlungen aus dem gesamten Gebiet der Medizin (Treatises in the Entire Field of Medicine), which was started in 1923. Springer had taken it over from the Rikola-Verlag, which had got into financial difficulties.*



Erstes Rundschreiben 1925.

In den nächsten Wochen werden in meinem Verlage die auf den nachfolgenden Seiten aufgeführten

Neuerscheinungen aus den Gebieten der Medizin, Naturwissenschaften, Ingenieur- und Bauwissenschaften

zur Ausgabe gelangen.

Ich empfehle diese Werke Ihrem besonderen Interesse und stelle weitere Exemplare dieses Rundschreibens zur Verbreitung unter Ihren Kunden gern kostenlos zur Verfügung.

Ihren Bedarf an meinen Neuerscheinungen bitte ich auf den am Schlusse des Heftes angefügten Bestellzetteln anzugeben.

Besteht die Absicht besonders tatkräftiger Verwendung für das eine oder das andere Buch, so bitte ich um direkte Mitteilung.

März 1925.

Julius Springer, Wien VI,

Amerlingstraße 17.

242 First circular issued by Springer-Verlag Wien, in the spring of 1925, announcing new publications in medicine, natural sciences, engineering and construction. It also gives details about Austrian to German currency exchange, as well as payment information for some eastern countries and Switzerland.

Ich berechne innerhalb **Österreich** in österreichischen Schillingen (1 Schilling = öK 10.000), nach **Deutschland** und dem **übrigen Ausland** in Goldmark (1 Goldmark = 10/42 Dollar = Schilling 1.70 = öK 17.000).

Die Bezahlung meiner Lieferungen erbitte ich in Schillingen, Reichsmark oder sonst einer stabilen Währung. Schecks auf nicht stabile Währungen oder Banknoten von Ländern mit nicht stabiler Währung weise ich zurück. Schecks müssen auf „Zahlbar Wien“ ausgestellt sein.

Zahlungen von Firmen aus **Österreich** erfolgen am besten entweder in bar an die Kasse meines Verlages oder auf mein österr. Postsparkassenkonto Nr. 23.556 oder auf mein Bankkonto bei der Österreichischen Creditanstalt für Handel und Gewerbe, Wechselstube Mariabhilf, Wien VII.

Für Zahlungen aus **Deutschland** empfehle ich mein Postscheckkonto in Leipzig Nr. 28.836.

Firmen in der **Tschechoslowakei**, in **Ungarn**, **Jugoslawien**, **Polen** und in der **Schweiz** benützen am besten die nachfolgend angegebenen Postsparkassenkonten:

Prag 78.251, Budapest 30.939, Zagreb 40.478, Warschau 190.804, Zürich Nr. VIII/10.854.

Im übrigen verweise ich auf die ausführlichen Bezugsbedingungen meiner Firma, die Sie auf der Rückseite meiner Lieferungsakturen aufgedruckt finden.

Julius Springer

Wien, VI., Amerlingstraße 17.

The establishment of the publishing house on March 10, 1924⁵⁰ coincided with a renewal of Viennese medicine. It was possible to get several leading figures for the firm, not least through the *Wiener klinische Wochenschrift*. The first “own” journal was started in 1927, *Ärztliche Praxis* (Medical Practice). The same year also saw the acquisition of *Österreichische botanische Zeitschrift* (Austrian Botanical Journal) from the publisher Carl Gerold & Sohn. Soon the firm also became active in some of the other areas cultivated by the Berlin company: engineering sciences, law and economics (Hans Kelsen, Alfred Verdross and Friedrich A. Hayek were among its authors), physics (Wolfgang Pauli) and philosophy (Moritz Schlick). More than 400 books and 12 scientific journals were published up to 1932.

Until the world economic crisis representatives of the *Minerva* bookshop regularly travelled through south-east Europe and at the same time made libraries and bookshops familiar with the output of Springer-Verlag Berlin. Occasional journeys took them as far as Turkey and Egypt. As the chances for sales rapidly deteriorated during the economic crisis, these activities had to be discontinued. From July 1, 1929, in order to economise, orders for the Vienna house were fulfilled by Berlin. That same year Springer-Verlag acquired the remaining shares of *Minerva*.

In 1935 Otto Lange became a co-owner of the Vienna firm. In 1942, after Ferdinand Springer had been forced by the national-socialist government to resign from Springer-Verlag Wien (see p. 373), Otto Lange and his brother Tönjes Lange acquired the residual part of the business [with the full consent of Springer]. The fact that Otto Lange had acquired Austrian citizenship in the 1930s played a large part in his securing ownership after 1945: Springer-Verlag was considered Austrian property and therefore, unlike other businesses, was not seized as German-owned property by the Occupying Powers.⁵¹

The number of Springer journals nearly doubled between 1918 *Journal Expansion* and the end of the inflation. To a considerable extent this growth resulted from the acquisition of the publishing houses of J. F. Bergmann (1917/18) with ten titles and Hirschwald (1921) with 12 titles. Added to these were 18 journals from other publishers, as well as 12 new journals or transformations of book series into journals (see List 7, p. 255).

Some of the acquired journals had got into difficulty during the war or the inflationary period, and others had stopped publication at the time they were acquired. Their current publishers would have questioned whether revival was feasible. For these reasons it can be assumed that they did not command a very high purchase price. In addition, journals which were being published very irregularly would have a reduced subscriber base, and for those that had actually ceased publication considerable investment would be required to win back their previous subscribers.

In some instances the change to Springer-Verlag was at the behest of the editors who will have hoped that Springer-Verlag had the financial strength not only to continue the journal but also to expand it. Thus Otto Lubarsch (the successor to Johannes



243 Photograph of Rudolf Virchow (1821–1902), founder of cellular pathology. In 1847 he started the *Archiv für pathologische Anatomie und Physiologie und für klinische Medizin*, named after him from 1902. His report of his experience on a study trip to Upper Silesia in 1847, published in Vol. 2 of the *Archiv*, shows his strong engagement in questions of social hygiene and welfare. Julius Springer was a member of the *Fortschrittspartei* (Progressive Party), co-founded by Virchow, in the Berlin Town Council. Virchow's books were published by August Hirschwald; the *Archiv* was taken over by Springer-Verlag in 1920.

Orth as Editor of *Virchows Archiv für pathologische Anatomie*) reported that the journal had shrunk from 2000 pages annually before the First World War to a total of about 1300 between January 1918 and July 1920. “This was not due to a lack of submitted work, which began to flow to it again after the war, but ... mainly to the publisher not having paid enough attention to the medical part of his production, leaving it to a rather petty managing clerk” [LUBARSCH: 361]. After some initial difficulty Lubarsch managed to persuade the publisher Walter de Gruyter to transfer the *Archiv* to Springer-Verlag. Taking over *Mathematische Annalen* followed a similar course (see p. 261).

Only a few publishers will have been in a position during the inflation to bring their journals up to their pre-war standard, but this was just what Springer managed to do. It is thus not surprising that editors were urging a change of publisher.

But Springer-Verlag divested itself of two journals during this period, the *Verein Deutscher Ingenieure* (Association of German Engineers) taking over its own journal in 1921 (see p. 244), and *Färber-Zeitung*, founded in 1889, being sold to Marcel Melliand (Mannheim) from July 1, 1920. As *Melliands Textilberichte* (Melliand's Textile Reports) it remains to this day a leading periodical for the textile industry.

Immediately after the end of the war Springer devoted himself with extraordinary vigour to rebuild the organisation of the *Zentralblätter* (Central Abstract Review Journals), which had to cease publication during the war. There was a great demand “to catch up,” because doctors had to learn about research findings during the last few years. Many of them had worked in military hospitals and had not had time to read medical literature. Advances in other countries had also remained unknown, because foreign journals were only rarely available during the war. During the inflation medical scientists lacked the foreign currency to order foreign journals or go to congresses, something which in any case they could not do because of the boycott of German science in the first few years after the war. (This changed only in 1926, when Germany was admitted to the League of Nations.) Springer-Verlag, however, was in a position, thanks to having accounts abroad, to obtain foreign literature, to assess it and make it available to scientists through reviews. According to a 1920 prospectus the editors of the *Zentralblätter* had at their disposal 345 German and 516 foreign journals soon after the war.

Zweck und Organisation der medizinischen Referatenblätter des Verlages Julius Springer in Berlin

Mit dem Bericht über die Weltliteratur des Jahres 1920 beginnen die im Verlage der Firma Julius Springer in Berlin erscheinenden medizinisch-biologischen referierenden Blätter ihre durch den Krieg unterbrochene Tätigkeit. Es sind dies:

1. **Kongreßzentralblatt für die gesamte innere Medizin und ihre Grenzgebiete.** Offizielles Organ des Deutschen Kongresses für innere Medizin. Erscheint wöchentlich.
2. **Zentralorgan für die gesamte Chirurgie und ihre Grenzgebiete.** Zugleich Fortsetzung des *Hildebrandschen Jahresberichtes über die Fortschritte auf dem Gebiete der Chirurgie* und des *Glaefnerschen Jahrbuches für orthopädische Chirurgie*. Herausgegeben unter Aufsicht der Deutschen Gesellschaft für Chirurgie. Erscheint wöchentlich.
3. **Zentralblatt für die gesamte Ophthalmologie und ihre Grenzgebiete.** Zugleich Referatenteil zu *Albrecht von Graefes Archiv für Ophthalmologie* und Fortsetzung des *Michelschen Jahresberichtes über die Leistungen und Fortschritte im Gebiet der Ophthalmologie*. Erscheint 14 tägig.
4. **Zeitschrift für Kinderheilkunde.** Referatenteil. Erscheint 14 tägig.
5. **Berichte über die gesamte Physiologie.** Neue Folge des Zentralblattes für Biochemie und Biophysik. Zugleich Fortsetzung des *Hermann-Weißschen Jahresberichtes über die Fortschritte der Physiologie*, des *Maly-Spiro-Andreaschen Jahresberichtes über die Fortschritte der Tierchemie oder der physiologischen und pathologischen Chemie*. Herausgegeben unter Aufsicht der Deutschen Physiologischen Gesellschaft. Erscheint 14 tägig.

In enger Verbindung mit diesen gemeinsam organisierten Blättern erscheinen im gleichen Verlage:

6. **Referatenteil der Zeitschrift für die gesamte Neurologie und Psychiatrie** und vom Jahre 1921 ab
7. **Referatenteil des Archives für Dermatologie und Syphilis.**

Diese referierenden Blätter verfolgen das Ziel, in rascher, zuverlässiger und vollständiger Weise über die gesamte medizinisch-biologische Weltliteratur zu berichten. Zur Erreichung dieses Zieles ist folgende Organisation geschaffen:

1. Jede wissenschaftlich wertvolle Zeitschrift des In- und Auslandes ist vom Verlage für die Organisation beschafft worden. Für das Jahr 1920 beträgt die Zahl der zum Referat bezogenen Blätter

345 deutsche,
516 ausländische.

Auf diese Weise ist die Zentralblatt-Organisation die einzige Stelle in Deutschland, vielleicht sogar in der Welt, in der die ganze medizinisch-biologische Zeitschriftenliteratur vereinigt ist.

2. Die einlaufenden Zeitschriften werden täglich von sämtlichen Redakteuren durchgesehen, die zum Referat bezeichneten Arbeiten vom bibliothekarisch vorgebildeten Büropersonal registriert und den vom Redakteur angeordneten Referenten übersandt.

Jeder Referent erhält grundsätzlich nur das Referat über Arbeiten auf solchen Gebieten zugewiesen, die er auf Grund eigener wissenschaftlicher Arbeit spezialistisch beherrscht.

244 In a four-page prospectus, sent out in the autumn of 1920, Springer-Verlag described the structure, aim and organisation of its just founded abstract/review journals (Zentralblätter) in medicine, surgery, ophthalmology, child health, and physiology.



245 Document conferring on Ferdinand Springer the honorary degree of Doctor of Medicine in the University of Frankfurt (see text).

Restarting the reviews of world-wide medical journals through Springer-Verlag's *Zentralblätter* (abstracts review periodicals) was welcomed gratefully in German medical circles. Thus Frankfurt University awarded Ferdinand Springer an honorary Doctorate of Medicine on January 11, 1922, to acknowledge "the understanding, unwaveringly optimistic advancement of German medical science, even at the most difficult times, enabling it to disseminate the fruits of its research and to be informed of the world medical literature."

Handbücher (*Handbooks*)*

By 1918 only one medical *Handbuch* had been completed (neurology); the second one (internal medicine) was completed in 1919. There were also J. F. Bergmann's six Handbooks. Even during the war and the inflation Ferdinand Springer had signed up authors and editors for several large projects, which started to be published from 1924 onwards. This delay was unavoidable, because neither paper nor binding materials of

* See footnote on p. 175.

The Journals are listed in order of year of acquisition (the name of the former publisher in brackets). This does not mean that they were continued the same year or under the same title by Springer-Verlag.

1918

Anatomische Hefte (Bergmann)
 Archiv für Augenheilkunde (Bergmann)
 Archiv für Entwicklungsmechanik der Organismen (Engelmann)
 Archiv für orthopädische und Unfall-Chirurgie (Bergmann)
 Deutsche Vierteljahresschrift für Zahnchirurgie (Bergmann)
 Ergebnisse der Anatomie und Entwicklungsgeschichte (Bergmann)
 Frankfurter Zeitschrift für Pathologie (Bergmann)
 Mathematische Zeitschrift (newly founded)
 Organ für die Fortschritte des Eisenbahnwesens (Kreidel)
 Pflügers Archiv für die gesamte Physiologie des Menschen und der Tiere (Hager)
 Praktische Ergebnisse der Geburtshilfe und Gynäkologie (Bergmann)
 Die Schwester (newly founded)
 Zeitschrift für analytische Chemie (Kreidel)
 Zeitschrift für Mund- und Kieferchirurgie (Bergmann)
 Zeitschrift für Ohrenheilkunde und für die Krankheiten der Luftwege (Bergmann)
 Zentralblatt für allgemeine Gesundheitspflege (Hager)
 Zentralblatt für Röntgenstrahlen, Radium und verwandte Gebiete (Bergmann)

1919

Zentralblatt für Biochemie und Biophysik mit Einschluß der theoretischen Immunitätsforschung (Borntraeger)

1920

Der Bauingenieur (Umgründung)
 Beiträge zur Klinik der Tuberkulose und spezifischen Tuberkulose-Forschung (Kabitzsch)
 Berichte über die gesamte Physiologie (previously book series)
 Mathematische Annalen (B. G. Teubner)
 Technik in der Landwirtschaft (newly founded)
 Virchows Archiv für pathologische Anatomie und Physiologie und für klinische Medizin (Reimer)
 Werft und Reederei (newly founded)
 Zeitschrift für Hygiene und Infektionskrankheiten, medizinische Mikrobiologie, Immunologie und Virologie (Reimer)

1921

Archiv für Dermatologie und Syphilis (Braumüller)
 Archiv für Gynäkologie (Hirschwald)
 Archiv für klinische Chirurgie (Hirschwald)
 Archiv für Laryngologie und Rhinologie (Hirschwald)
 Archiv für Psychiatrie und Nervenkrankheiten (Hirschwald)
 Archiv für wissenschaftliche und praktische Tierheilkunde (Hirschwald)
 Berliner klinische Wochenschrift (Hirschwald)
 Hygienische Rundschau (Hirschwald)

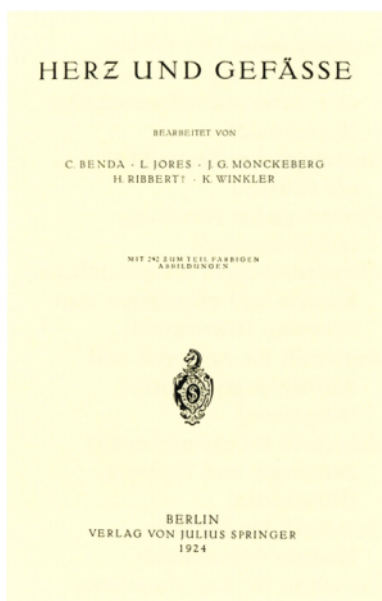
Internationales Centralblatt für Laryngologie, Rhinologie und verwandte Wissenschaften (Hirschwald)
 Neurologisches Zentralblatt (de Gruyter)
 Psychologische Forschung (newly founded)
 Vierteljahresschrift für gerichtliche Medizin und öffentliches Sanitätswesen (Hirschwald)
 Zeitschrift für Anatomie und Entwicklungsgeschichte (Bergmann)
 Zeitschrift für experimentelle Pathologie und Therapie (Hirschwald)
 Zeitschrift für klinische Medizin (Hirschwald)
 Zeitschrift für Krebsforschung (Hirschwald)
 Zeitschrift für Physik (Vieweg)
 Zentralblatt für die gesamte Tuberkuloseforschung (Kabitzsch)
 Zentralblatt für Haut- und Geschlechtskrankheiten (newly founded)

1922

Archiv für mikroskopische Anatomie (Cohen)
 Zeitschrift für Hals-, Nasen- und Ohrenheilkunde (newly founded)

1923

Berichte über die gesamte Gynäkologie und Geburtshilfe sowie deren Grenzgebiete (previously book series)
 Milchwirtschaftliche Forschungen (newly founded)
 Der Radio-Amateur (newly founded)
 Zeitschrift für die gesamte physikalische Therapie (Thieme)
 Zeitschrift für Kinderforschung (Beyer & Söhne)



246 Title page (Herz und Gefäße; Heart and Vessels) of the first published volume of the *Handbuch der speziellen pathologischen Anatomie und Histologie*. Preparations for the series had started well before the outbreak of World War I, but publication was delayed until 1924. There were 80 contributors listed on the title page of the series. Under the overall editorship of Otto Lubarsch 20 volumes had appeared by 1931.

satisfactory quality were available. Furthermore, research findings in the intervening years had to be taken note of.

The *Handbuch der speziellen pathologischen Anatomie und Histologie* (Handbook of Special Pathological Anatomy and Histology) was among the first large projects that began to appear after the inflation. Springer had contacted Friedrich Henke in the late summer of 1912 and persuaded him to be one of the editors of the *Handbuch*. At that time Henke was still in Königsberg, as professor of pathology, but he moved to Breslau in 1913. The plan was for a 14-volume work of about 7000 pages. The manuscripts were to be ready in July 1915. However, Henke was slow to invite contributors and prevaricating in his replies to Springer's admonitory letters. Because of this Springer went to visit Ludwig Aschoff, professor of pathology at Freiburg, whom he knew quite well, to ask his advice. He was delighted to find that Aschoff was prepared to be co-editor with Henke. The latter accepted this in principle, but Aschoff wanted to extend the board of editors by adding a representative of the "Berlin School," something which pleased Springer. To have Aschoff as participant was worth a little delay, but in the middle of July 1913 he resigned, because his ideas were different from Henke's.

At the turn of the year 1913/14 contributors had been found and the first contracts signed, but progress was too slow for Springer: "It seems to me worrying if the project is not soon completed," he wrote to Henke on January 16, 1914. He once again "urged [him] to take on a co-editor." Springer himself now performed the task of contacting those authors who had not yet fully decided, usually with success.

In the summer of 1914 most of the contributors' contracts had been signed, but with the outbreak of war all discussions about deadlines became meaningless. When one of the authors inquired of Springer in January 1915 about the final deadline, the latter proposed "that we talk about a new delivery date when friendlier times have returned." It is understandable that in these circumstances many authors wished to withdraw from their contracts.

In May 1918 Springer had gone to see Otto Lubarsch who had succeeded Virchow in Berlin. There were two reasons why meeting Lubarsch was important to Springer. First, Lubarsch had been under contract to the J. F. Bergmann publishing house (just taken over by Springer-Verlag), since 1896 as editor – together with Robert Ostertag – of *Ergebnisse der allgemeinen Pathologie und der pathologischen Anatomie* (Results of General Pathology

and Pathological Anatomy). Secondly, Springer was still looking for an active co-editor of the *Handbuch*. Lubarsch agreed without much hesitation to participate in the project, but on the condition that the editorial procedures were exclusively in his hands [LUBARSCH: 361]. Henke was quite pleased to accept this, as long as he would rank first as editor, as he would in an alphabetical listing. His own contribution, on pulmonary tuberculosis was later rejected by Lubarsch as being unusable [HAMPERL: 137].

Lubarsch was an unusually diligent editor. Under his guidance 20 volumes had been published by 1930. He was strict with himself and his authors. He did not hesitate to reject submitted contributions, to send them back for revision or rewrite them himself. He made sure that the agreed number of illustrations was strictly adhered to, as he felt himself in relation to the publisher “especially obligated, because illustrations are the most important part of the costs and he [Ferdinand Springer] always and in every respect met my wishes and almost blindly followed my proposals” [LUBARSCH: 476].

Late authors were abhorred by Lubarsch, and on a few occasions he decided “out of respect for the collaborators who had delivered punctually, ... to publish a volume in two or three parts, so that the completed contributions would not be out of date by the time they appeared.” He was quite aware how very troublesome it was for many scientists to deliver solicited articles and that frequently animosities against the person requesting them (be they professional or personal conflicts) aggravated the collaboration [LUBARSCH: 475].

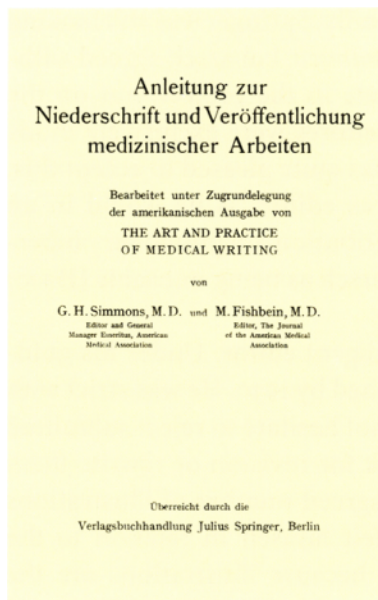
However, Lubarsch tended to avoid the word *Animosität* (animosity) and would write *Unlustgefühle* (feeling of reluctance), because he was fighting a bitter battle against foreign words and tried “to educate his collaborators to write good German instead of medical gibberish.” It is still rewarding today to read this part of his memoirs [LUBARSCH: 480–485].⁵²

The first volumes of the *Handbuch der experimentellen Pharmakologie* (Handbook of Experimental Pharmacology) were also published in 1924, edited by Arthur Heffter. After Heffter's death the following year, Springer's friend Wolfgang Heubner continued the series. 1925 saw the publication of the supplement to the *Handbuch der Neurologie*, edited by Otfried Foerster and Oswald Bumke. From now on several new projects were begun and others continued. The numbers of volumes of the various Handbooks were:



247 Otto Lubarsch (1860–1933) was called to Virchow's chair of pathology at Berlin University in 1917, in succession to Johannes Orth. At Springer-Verlag Lubarsch not only edited the *Handbuch* (from 1920), but also *Virchows Archiv*. From 1895 he also edited, with Robert Ostertag, the series *Ergebnisse der allgemeinen Pathologie und pathologischen Anatomie* (Results in General Pathology and Pathological Anatomy), published by J. F. Bergmann. In 1931 Springer-Verlag published his memoirs *Ein bewegtes Gelehrtenleben* (A Scholar's Eventful Life).

248 From 1929 Springer-Verlag distributed to its authors and editors a translation, adapted to German circumstances, of *The Art and Practice of Medical Writing* by G. H. Simmons and M. Fishbein (for many years editor of the *Journal of the American Medical Association*). One purpose in distributing the booklet was to counter the particularly fierce attacks on the high prices of German medical journals in those days. By implication the book made clear that at least some of these prices were due to the long-winded and over-inflated diction of German authors. 249 A similar German book (*Guide for Authors of Scientific Writings*, edited by Kurt Kolle) “in collaboration with Springer-Verlag”, was published in 1964.



1924: 8 Volumes	1929: 39 Volumes
1925: 16 Volumes	1930: 48 Volumes
1926: 25 Volumes	1931: 44 Volumes
1927: 35 Volumes	1932: 31 Volumes
1928: 47 Volumes	1933: 19 Volumes

Planning such an extensive production was entirely the responsibility of the publisher (see p. 259). Even though Ferdinand Springer’s advisers told him what was needed and suggested suitable editors or authors, the realisation of the various projects and not least the motivation of editors and authors depended on his decisions.

As soon as manuscripts arrived the production department took over the detailed work. Yet there were frequently problems whose solution Springer reserved for himself. Naturally there were special questions that editors and authors wanted to see handled by direct contact with the publisher. Springer would also step in immediately when a dangerous situation seemed to be developing, for example if an editor did not act energetically enough, an author was unreasonably slow, or the agreed length of a contribution or number of illustrations had been greatly exceeded. Often a list of contents had to be changed, because a topic turned out to be too extensive for one volume. For example, the *Handbuch* edited by Lubarsch, planned to have 14 volumes, in the end comprised 41.^{52a}

- Handbuch der Anatomie des Kindes. Ed. by Karl Peter, Georg Wetzell and Friedrich Heiderich. Two vols. 1927–1938 (brought out in instalments)
- Handbuch der mikroskopischen Anatomie des Menschen. Ed. by Wilhelm von Möllendorff. Seven vols. in 17 parts. 1927–1943. [GM 563]
- Handbuch der speziellen pathologischen Anatomie und Histologie. Ed. by Otto Lubarsch, Friedrich Henke and Robert Rössle. 13 vols. in 28 parts. 1924–1939. [GM 2311]
- Handbuch der Astrophysik. Ed. by Gustav Eberhard, Arnold Kohlschütter and Hans Ludendorff, seven vols. in ten parts. 1929–1936
- Handbuch der Bodenlehre. Ed. by Edwin Blanck. 11 vols. 1929–1939
- Handbuch der Eisen- und Stahlgießerei. Ed. by Carl Geiger. 2nd ed., four vols. 1925–1931
- Handbuch des Eisenhüttenwesens. Ed. by Verein Deutscher Eisenhüttenleute. Three vols. 1929–1939 (unfinished)
- Handbuch der Ernährung und des Stoffwechsels der landwirtschaftlichen Nutztiere. Ed. by Ernst Mangold. Four vols. 1929–1932
- Handbuch der Geburtshilfe. 2nd ed. Ed. by Albert Döderlein. Three vols. in four parts. 1924 and 1925
- Handbuch der Geisteskrankheiten. Ed. by Oswald Bumke. 12 vols. 1928–1939
- Handbuch der Gynäkologie. 3rd ed., ed. by Walter Stoeckel. 12 vols. in 21 parts. 1926–1938 (unfinished)
- Handbuch der Hals-, Nasen-, Ohrenheilkunde mit Einschluß der Grenzgebiete. Ed. by Alfred Denker and Otto Kahler. Nine vols. 1925–1929
- Handbuch der Haut- und Geschlechtskrankheiten. Ed. by Josef Jadassohn. 23 vols. in 41 parts. 1927–1934. [GM 4006]
- Handbuch der Kinderheilkunde. Ed. by Meinhard v. Pfaundler and Arthur Schloßmann. 4th ed., ten vols. 1926–1935. [GM 6747]
- Handbuch des Maschinenwesens beim Baubetrieb. Ed. by Georg Garbotz. Two vols. 1931 and 1937 (unfinished)
- Handbuch der inneren Medizin. 3rd ed., ed. by Gustav v. Bergmann, Rudolf Staehelin and Victor Salle. Six vols. in nine parts. 1926–1939
- Handbuch der Milchwirtschaft. Ed. by Willibald Winkler, Walter Grimmer and Hermann Weigmann. Three vols. in six parts. 1930–1936 (Springer Wien)
- Handbuch der Neurologie. Six supplementary vols. to 1st ed. Ed. by Oswald Bumke and Otfried Foerster. 1923–1929. New edition published 1935–1937 in 17 vols. [GM 4613]
- Kurzes Handbuch der Ophthalmologie. Ed. by Franz Schieck. Seven vols. 1930–1932
- Beilsteins Handbuch der Organischen Chemie. 4th ed., vols. 1–17. 1918–1933 ff.
- Handbuch der Pflanzenanalyse. Ed. by Gustav Klein. Four vols. 1931–1933 (Springer Wien)
- Handbuch der experimentellen Pharmakologie. Ed. by Arthur Heffter and Wolfgang Heubner. Three vols. in seven parts. 1920–1935 (nine supplement vols. 1935–1941)
- Handbuch der Pflanzenernährung und Düngerlehre. Ed. by Franz Honcamp. Two vols. 1931
- Handbuch der wissenschaftlichen und angewandten Photographie. Ed. by Alfred Hay and Moritz v. Rohr. Eight vols. in nine parts. 1929–1933 supplement. vol. 1943 (Springer Wien)
- Handbuch der Physik. Ed. by Hans Geiger and Karl Scheel. 24 vols. 1926–1933
- Handbuch der normalen und pathologischen Physiologie. Ed. by Albrecht Bethe, Gustav v. Bergmann, Gustav Embden and Alexander Ellinger. 18 vols. in 25 parts. 1925–1932. [GM 662]
- Handbuch der gesamten Strahlenheilkunde, Biologie, Pathologie und Therapie. Ed. by Paul Lazarus. 2nd ed., two vols. 1928 and 1931
- Handbuch der Urologie. Ed. by Alexander v. Lichtenberg, Friedrich Voelcker and Hans Wildbolz. Five vols. 1926–1929
- Handbuch der Zahnheilkunde. Ed. by Christian Bruhn, Alfred Kantorowicz and Carl Partsch. Four vols. 1925–1939

List 8 Handbooks, 1924–1933, begun or finished, without those acquired from other publishers. (GM = mentioned by Garrison/Morton; see p. 260)

The investment required in the production of Handbooks cannot be overestimated. The total list price gives an approximate idea: a library which bought all the volumes published in 1928 would have had to spend 3650 mark for the 41 volumes or instalments. As Handbooks were only exceptionally within a practitioner's means, especially those of Springer-Verlag which were "unsurpassed in the reproduction of illustrations, in paper and printing" [BRUGSCH:150] – and this was undoubtedly true also of the contents – most libraries had to buy them. Where there had been gaps due to budget cuts, they were filled in the 1930s. At a time of fewer new productions these back-list sales helped stabilise revenue.

As early as 1903 the political scientist Karl Bücher had criticised the production of Handbooks: "The diligence of such enterprises at times was so extensive that in some branches of science everybody in German universities who was able to hold a pen was harnessed to them and real research activities suffered, as can be seen clearly from a decrease in monographs during that time" [BÜCHER:196]. Similar arguments had been propounded when the *Ergebnisse* (Results) series were being planned (see p.172). Bücher did, however, admit that that a scientific need existed "where after a period of specialist detailed work a systematic summary of results was necessary" [BÜCHER:197].

A critical summary of scattered reports on recent research findings, reviewing the current state of knowledge in a given subject, can often provide new insights. It speaks for the quality of some of Springer-Verlag's Handbooks that they have found a place in Garrison/Morton's bibliography of the "most important contributions to the literature of medicine." Since 1850, this critical listing has contained mainly primary writings that have contributed to the advancement of medicine. It specifies largely journal articles and only exceptionally multi-volume works, among the latter seven large Springer Handbooks. The list (on p. 259) includes the reference number of Garrison/Morton [GM] in brackets.

Mathematics in Göttingen:
Richard Courant

Mathematicians and physicists want and need speedy publication of their work at least as much as other scientists. This requires efficient publishing houses. Unfortunately there were few of these after World War I. The leading firm in this area, B. G. Teubner of Leipzig, had by its own admission decided

to give clear priority to its profit-bringing schoolbook programme “over the less lucrative literature in the sciences and for institutions of higher learning” [MÜLLER/PLANITZER: 61]. This can also be taken as a rejection by Teubner of mathematical “intuitionism.” This attitude was supported by those who were convinced that there was a “crisis in the foundations of the exact disciplines” [MÜLLER/PLANITZER: 71].

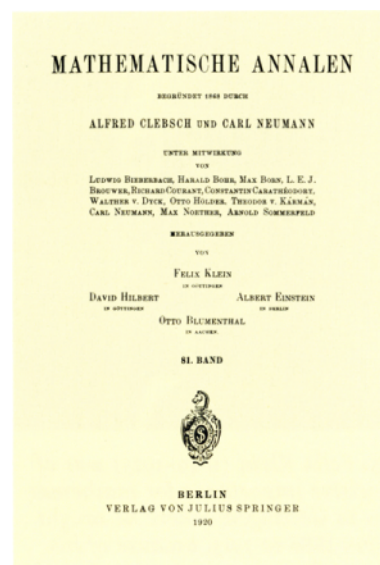
This withdrawal by Teubner and the reluctance of other publishers who had been active in this area gave Springer his chance and he used it. In November 1919, hardly two years after the first issue, the fourth volume of *Mathematische Zeitschrift* (Mathematical Journal) had come out. The mathematical community was impressed by this speed of publication. In contrast, in the last issue of Vol. 79 of *Mathematische Annalen* (Mathematical Annals), which had appeared in the spring of 1919, Teubner had pointed out his problems: continuation of the journal was severely affected by the low print-run, the loss of the previously high proportion of foreign subscribers, as well as the “production costs which were rising immeasurably.” The editors and publisher asked that “understanding indulgence be shown”. The editors from Göttingen, Felix Klein and David Hilbert, and the executive editor, Otto Blumenthal, were less understanding than this notice requested.

An editorial preface in the first issue of Vol. 81 (published on October 20, 1920) indicates that the editors had asked Teubner to guarantee a definite number of pages per year:

We were unable to remain with Teubner-Verlag, because it declared itself not in a position to publish one volume of 36 sheets [36×16 pages] of the “Annals” annually, and told us that, if we persisted with this demand, it would have to return the enterprise into our hands.

A few months earlier the editors had contacted Springer and an agreement was signed on February 23, 1920. Albert Einstein became the third co-editor, replacing Walter von Dyck, the mathematician in Munich.

In their turn the editors had promised to publish 60–80 sheets (960–1280 pages). This goal was not reached for technical reasons, for which the publisher was not responsible. During the years of inflation “only” 800 pages were published on average per year, i. e. at least 224 more pages than the editors had demanded of Teubner. Both editors and members of the editorial board of *Mathematische Annalen* and *Mathematische Zeitschrift* were fully satisfied with Springer’s commitment, as can



250 Title page of *Mathematische Annalen*, founded in 1868 by Alfred Clebsch and Carl Neumann, the leading German mathematical periodical (edited by Felix Klein, David Hilbert, Albert Einstein and Otto Blumenthal); taken over by Springer in 1920.



251 *Felix Klein (1849–1925) was of decisive importance for mathematics in Göttingen, where he taught from 1886 to 1913, because of his scientific and organisational work. He initiated the reform of mathematics teaching in German schools and managed to interest large industries in his aims, especially through establishing the Vereinigung zur Förderung der angewandten Physik und Mathematik (Association for the Advancement of Applied Physics and Mathematics).*

be seen from a testimonial which they presented to Ferdinand Springer at Springer House on July 17, 1923 to mark the publication of the 25th volume of mathematical journals by the firm (Fig. 252):

If your entrepreneurial inclination, readiness to make sacrifices and your circumspect energy had not taken up the cause of the mathematical sciences, mathematics in Germany would no longer be viable. That this is not so and that the German mathematical journals continue to be among the most respected in the world, the German mathematicians and thus science itself have largely to thank you.

This was signed by, among others, Felix Klein, David Hilbert, Richard Courant, Max Born, Ludwig Bieberbach, Albert Einstein, Edmund Landau and Arnold Sommerfeld. On February 1, 1930 the mathematical-natural sciences faculty of the University of Göttingen awarded an Honorary Doctorate of Philosophy to Ferdinand, “in recognition of his decisive actions in the maintenance and development of the German mathematical literature.”

Berlin had for a long time been the centre of mathematics – the four editors of *Mathematische Zeitschrift* had professorial chairs there – but Göttingen was increasingly gaining importance. Springer’s first contact from the “Göttingen Circle” was Richard Courant (1888–1972). In the summer of 1917 the latter had turned to Arnold Berliner asking him to establish a connection to Springer-Verlag for him. They met in Ilsenburg (Harz mountains) on September 28, 1917, where the young mathematician was working at a military instruction centre for terrestrial telegraphy. Courant’s name had been known to Springer since 1914, when Leon Lichtenstein had mentioned him along with others as potential author for a mathematics programme (see p. 230).

They liked each other at once [REID: 81 f.]. At their very first discussion Courant suggested a major project, publication of “the fundamental teachings of the mathematical sciences in individual presentations, with particular emphasis on applied areas.” In July 1918 Courant reported on his discussions with the physicist Max Born. Soon after he had David Hilbert in favour of the plan. Apparently this had not been very difficult, because Courant had always remained in touch with Hilbert whose assistant he had been even before obtaining his doctorate (1909). Other senior editors were to be Wilhelm Blaschke and Carl Runge.



Sehr verehrter Herr Dr. **S**pringer!

Die unterzeichneten Redaktionsmitglieder der „Mathematischen Annalen“ und „Mathematischen Zeitschrift“ möchten den Tag, an welchem der fünfundzwanzigste in Ihrem Verlage erscheinende Band mathematischer Zeitschriften herausgegeben wird, nicht vorübergehen lassen, ohne Ihnen gegenüber zum Ausdruck zu bringen, wie sehr sie von der Wichtigkeit Ihres Eintretens für unsere Wissenschaft durchdrungen sind und wie hoch sie dieses Eintreten einzuschätzen wissen. Wenn nicht Ihre opferbereite Unternehmungslust und Ihre umsichtige Energie sich der Sache der mathematischen Wissenschaft angenommen hätte, so würde heute die Mathematik in Deutschland nicht mehr lebensfähig sein. Dass sie es noch ist, und dass die deutschen mathematischen Journale nach wie vor zu den angesehensten der Welt gehören, haben die deutschen Mathematiker und damit die Wissenschaft überhaupt wesentlich Ihnen zu verdanken.

Nehmen Sie an diesem Tage mit unseren Glückwünschen den Ausdruck der Hoffnung entgegen, dass der beschrittene Weg unter gegenseitigem Vertrauen und Verständnis unbeirrt weiter gegangen wird.

Berlin und Göttingen, den 17. 7. 23.

*Klein D. Hilbert C. Carathéodory R. Courant
 Max Born Ludwig Bieberbach Knopp A. Einstein
 Erhard Schmidt J. Schur O. Joliss G. Herglotz L. Lichtenstein
 C. Neumann F. Schur A. Kneser E. Hecke W. Dyck
 A. Perron E. Landau W. Blaschke A. Sommerfeld*

Herrn Dr. Ferdinand Springer.

252 Address of thanks by the German mathematicians and physicists to Ferdinand Springer after publication of vol. 25 of the *Mathematische Annalen* and *Mathematische Zeitschrift*. Nine volumes of the *Annalen* and 16 of the *Zeitschrift* had been published since Springer-Verlag took over their publication just 30 months earlier. Springer-Verlag had achieved what the previous publisher had refused to do and thought was impossible. The Document was signed (from top left) by: Felix Klein, David Hilbert, Constantin Carathéodory, Richard Courant, Harald Bohr, Max Born, Ludwig Bieberbach, Konrad Knopp, Albert Einstein, Erhard Schmidt, Issai Schur, Otto Hölder, Gustav Herglotz, Leon Lichtenstein, Carl Neumann, Friedrich Schur, Adolf Kneser, Erich Hecke, Walter von Dyck, Oskar Perron, Edmund Landau, Wilhelm Blaschke and Arnold Sommerfeld.

From now on two or three letters were exchanged every week between Courant and Springer. On November 18, 1919 Springer was able to note: “At the moment I cannot save myself from the flood of mathematical offers – not a day passes without one.” But there were some that had “earlier appeared in several editions” at Teubner-Verlag.

Courant would always respond quickly and straightforwardly. In his usually quite extensive letters he also went into the situation of the scientific publisher in Germany, arguing about the work of the Emergency Association of German Science

(see pp. 240, 242) or the currency surcharges. He reported at some length on a visit to Göttingen of the Danish mathematician Niels Eric Nörlund who had brought the news from Paris that “the French and also the neutrals with strong currencies were suffering under similar, in part even greater, printing difficulties as we, with the difference that there they don’t have a Springer-Verlag that despite it all does something. . . . Basically I feel there may be a business chance, because at the moment our production costs in the book trade [i. e. the printing industry] are far below world market prices.” This would be a good opportunity to attract foreign authors.

Springer knew how to appreciate Courant’s suggestions and advice: “You are more and more growing into my chief adviser in matters mathematical and physical. The extent to which I am allowing myself to make demands on you is growing ever greater, and so I cannot any longer allow myself to take up so much of your time without some significant reciprocity on my part.” He suggested “fixed annual compensation for expenses” of 1500 mark (ca. 450 goldmark) per quarter, beginning on October 1, 1921. Courant accepted “after some thought.” He had at first had some reservations, especially as he knew “with what material sacrifice your publishing house makes the cultivation of our sciences possible at the moment.” But he asked that the arrangement be kept confidential, “because otherwise the danger of misinterpretation by outsiders might arise.”

The first volume of *Grundlehren* (Basic Teachings), soon just called the “Yellow Series,” appeared in 1921: Blaschke’s *Vorlesungen über Differentialgeometrie und geometrische Grundlagen von Einsteins Relativitätstheorie* (Lectures on differential geometry and geometric foundations of Einstein’s relativity theory). Three more books were brought out in the series in 1922, and another five in 1923. By 1992 there were 300 volumes. There is probably no better measure of their quality than that today, 70 years after the start of the series, 13 of the first 30 volumes are still in print as revised editions.

Courant was unique in “his interest in other people, his unselfish relation to the world,” as remembered by Paul Alexandroff in 1971 [REID: 126]. In the spring of 1923 Alexandroff had come to Göttingen with P. S. Uryson. They were the first scientists who had been officially permitted by the Soviet Union to travel abroad. Courant made it possible for Alexandroff to give regular lectures during his several stays in Göttingen. He was later followed by Andrej Kolmogorov, Alexander Khintchine

253 *The Russian mathematician Andrei Kolmogorov (1903–1987) frequently worked with Courant in Göttingen during the 1920s. In 1933 Springer-Verlag published a book by him, Grundbegriffe der Wahrscheinlichkeitsrechnung (Basic Concepts of Probability Calculation), of which the American mathematician Paul Halmos wrote: “This is without doubt one of the most important mathematics books of the century . . .” [EWING: 45].*





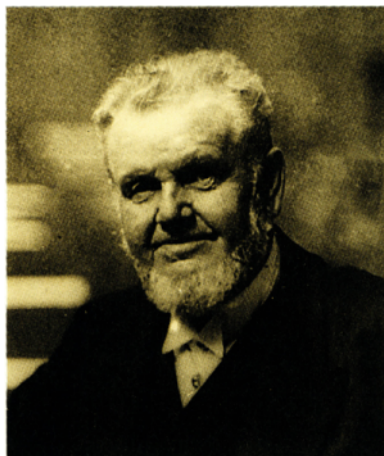
254 Group photograph on the occasion of David Hilbert's 60th birthday on January 23, 1922. In the middle: Hilbert and his wife. Bottom row, from left: Richard Courant, Franz and Mia Hilbert. Top left: Ferdinand Springer and (below him) Elisabet Kálvin, his future wife.

and other Russians. From 1932 to 1935 Springer-Verlag published their writings on probability calculations and topology. "The Russians filled a gap, because of their familiarity in some abstract branches of mathematics, which were only poorly represented in Göttingen," a contemporary scientist remembered [REID: 125].

Göttingen had become a stronghold of mathematics through the work of Felix Klein, David Hilbert and Hermann Minkowski. Klein had been concerned to forge closer links between mathematics and physics and the engineering sciences even before his call to the chair of mathematics at Göttingen in 1886. He had found a friendly advocate in the Prussian ministerial head of science policy, Friedrich Althoff [VOM BROCKE]. An important step in this direction was the founding, with the physicist Heinrich Weber, of the *Vereinigung zur Förderung der angewandten Physik* (Association for Promoting Applied Physics), to which title *und Mathematik* was added later, as well as the appointment of Carl Runge to the first chair of applied mathematics, in 1904.

The development of Göttingen, also becoming a centre of research in physics occurred immediately after the war, when

Physics in Göttingen:
Max Born



255 Friedrich Althoff (1839–1908) was, as *Ministerialdirektor* (head of a ministerial department), responsible for universities and institutions of higher learning in Prussia. In this capacity he had great influence in building up the German university system and supporting it through shrewd appointments and budget policies. It was thanks to him and his contact with Felix Klein that mathematics and physics were especially encouraged at Göttingen University.

James Franck took over the *Zweite experimentelle Abteilung* (Second Experimental Department) and Max Born⁵³ was appointed to the chair of theoretical physics. The part played by Robert Pohl, who was called to the chair of experimental physics in 1920, must not be forgotten. It was thanks to this triumvirate and a large number of committed young physicists that Göttingen became the “world centre of physics.”

Niels Bohr, professor in Copenhagen, had close ties to Göttingen [HUND:64] and, in June 1922, over seven evenings presented his ideas there. His listeners had come from far and near: Ehrenfest, Landé, Pauli and Sommerfeld, accompanied by Werner Heisenberg, then 20 years of age. Ferdinand Springer, who had taken part in this “Bohr Festival,” wrote to Sauerbruch on June 19, 1922, much impressed: “Yesterday I returned from Göttingen where a number of German and foreign physicists and mathematicians had gathered to hear the lectures of the Nobel Laureate Niels Bohr. There can be no doubt that at least in mathematics and physics something quite extraordinary has been achieved here in Germany, happily by quite young people.”

Springer had first met Max Born (1882–1970) in Göttingen in May 1913. It is likely that Arnold Berliner, who had known Born from his years in Breslau, will have mentioned Born to Springer [BORN:122]. In a travel memorandum Springer mentioned a plan by Born of a book on *Raum und Zeit* (Space and Time), “in which he was to deal especially with Einstein’s theory of relativity.” They also mooted the need for a textbook of theoretical physics. Finally, Springer had discussed with him the possible founding of an *Archiv für physikalische Mathematik* (Archive for physical mathematics) to which preliminary considerations had been given within the Göttingen circle.

The relationship was revived after the war when Born held the chair for theoretical physics at Frankfurt. Born, who had not had a happy experience with his Leipzig publisher, gave Springer two books for publication: *Relativitätstheorie in elementarer Darstellung* (Elementary Presentation of Relativity Theory) – which had already been mentioned in 1913 – and a summary of three articles in *Die Naturwissenschaften*, which soon appeared under the title *Aufbau der Materie* (Structure of Matter).

On April 12, 1920 Born sent his manuscript of *Die Relativitätstheorie Einsteins und ihre physikalische Grundlagen* (Einstein’s Theory of Relativity and Its Physical Foundations).

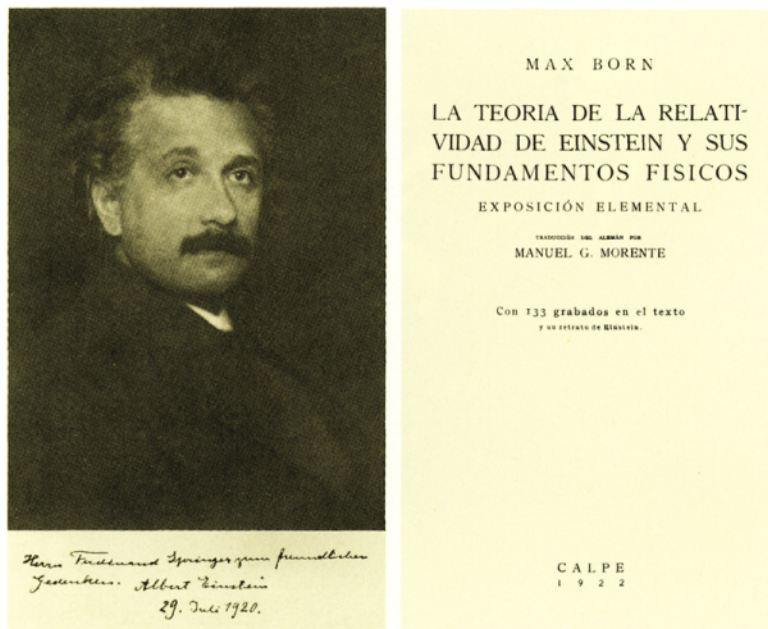


256 The “triple stars”, Max Born (1882 to 1970), James Franck (1882 to 1964) and Robert Pohl (1884 to 1976) shaped the development of Göttingen to become the “world centre of physics”. In a pun on their names, their respective students were called the “borné”, the “franked” and the “polished”.

Galley proofs were also to be sent to Einstein, Hilbert and Sommerfeld. Another set went to Moritz Schlick (in Rostock at the time) whose *Allgemeine Erkenntnislehre* (General Epistemology) had come out as the first volume of *Naturwissenschaftliche Monographien und Lehrbücher*, edited by Arnold Berliner. Born’s book was to be the third of the series. His proposal to have a picture of Einstein opposite the title page, while unusual in a publication about a contemporary colleague’s theory, was readily accepted by the publisher. But shortly before publication some objections were heard, even from friends of the publishing house. The reason for these reservations goes back to a meeting held on August 24, 1920 at the *Berliner Philharmonie* (Berlin Philharmonic Hall), at which Einstein’s theory of relativity had been defamed as scientific Dadaism. The opinions expressed had a strongly antisemitic character [SARKOWSKI (9):12]. It was at the same time the first stirrings of an ideo-

257 Albert Einstein was one of the editors of *Mathematische Annalen* and a contributor to *Naturwissenschaften*. But Springer failed to persuade him to write a larger publication; Einstein was not a book author. (The inscription is to “Herrn Ferdinand Springer in friendly remembrance”.)

258 Title page of the Spanish edition of Max Born’s book on Einstein’s theory of relativity, with an introduction by José Ortega y Gasset.



logically tainted physics, later developing into “German Physics” whose mouthpieces were Philipp Lenard (Nobel Prize in 1905) and Johannes Stark (Nobel Prize in 1919).

Born, who only heard about the “disgusting attacks on Einstein” two weeks later, agreed “in principle” with Max von Laue who, in a letter dated September 7, 1920 had argued against printing the picture. Springer, however, did not share this opinion: “Neither you nor my firm are obliged to retreat in this way,” he replied on September 10, 1920. “No one can deny you the right to add a picture of Einstein to your book. If anyone objects to it and sees it as an unnecessary adoration and openly expresses this opinion, he can be quite simply and objectively dealt with.”

The book became available just in time for the annual meeting of the *Gesellschaft Deutscher Naturforscher und Ärzte* (German Society of Naturalists and Doctors) in Bad Nauheim, where on September 23, 1920, there occurred a memorable dispute, vehemently pursued on both sides [BEYERCHEN:124ff.] (see above). The book was sold out a few months later, but Born was unable to revise it at once because he had just gone to Göttingen, in succession to Peter Debye who had taken up a chair in Zurich. He asked for a delay until the beginning of March 1921: “Under no circumstances can the book come out unchanged in a second edition. I have found numerous deficiencies and errors.” The new edition was published in the



259 In 1889 Springer published Gauss's *Untersuchungen über höhere Arithmetik* (Studies on Higher Arithmetic), a collection of articles in one volume. They had previously been available only in Latin.

260 In 1923 Springer-Verlag took over publication of Gauss's collected works, on commission from the Gesellschaft der Wissenschaften zu Göttingen (see text).

summer of 1921 (without the frontispiece), and a year later another edition was necessary. In the meantime translations in French, English and Italian had appeared. The financial return from these licensed translations was very small for both author and publisher, but the international reputation, which Born gained at a time when German scientists were largely excluded from international communication, was of much greater importance.

In 1923, in succession to Felix Klein who had resigned, Max Born was appointed chairman of the committee for the publication of works by Carl Friedrich Gauß (1777–1855) by the *Gesellschaft für Wissenschaften* (Society of Sciences at Göttingen), whose secretary was Carl Runge. There had been hardly any progress with the project in the last few years and the committee had decided to change publisher. On July 3, 1923 Born told Ferdinand Springer that he had cancelled the contract with Teubner for publication on commission from August 1, 1923, and he now inquired whether Springer was willing to take over publication. An affirmative answer came by return of post, with the wish to acquire full right of publication for all future volumes. This was agreed. Production was started at the height of the inflation; the series, started in 1870, was concluded in 1933. Quite frequently Springer-Verlag had to subsidise the enterprise during the economic crisis, because the Göttingen Society of Sciences had, due to budget cuts, hardly any money for publications.

Born was a hard partner in financial matters. He thought of himself as “a fighter for an economically very hard-pressed

group of brain-workers,” although he had to admit that he himself was in a better financial position than many of his colleagues. He nonetheless felt it his “duty to see to it that the contracts with the publishers are as favourable as possible (February 10, 1920).” When Born came back to this subject a few months later – “I reserve the right to take up quite energetically the struggle for higher payments to authors in the future” – Springer reacted with remarkable sharpness:

May I ask why you consider it necessary to fight me to obtain adequate payment for yourself and other authors? If you do, I herewith explicitly declare my willingness to release you from your contracts with me and to give you a free hand to give your books to others for publication. It annoys me, when my constant endeavour is always to place the interests of the author and of the undertaking as high as my own, that in just one instance, with an author whom I specially respect and care for, my efforts end in complete fiasco. I should like to ask you to respond to this question quite openly.

Born at once replied in a conciliatory manner. It was quite painful to him to have offended Springer. He continued to be convinced that he would “never be able to find a more conciliatory, generous publisher.” His own irritation he explained at length with the “underpayment of brain-work” and with the misery at the universities. He would try “to support the present attempts at organisation in this direction” (August 6, 1921).

Springer was sceptical about Born’s expectation that the position of the writer could be improved by the intervention of associations of authors:

All my experience with negotiations from one organisation to another has taught me that this leads to a levelling of mutual demands, under which outstanding achievements in particular will suffer. Also the brain-workers would be lowering themselves if they were to fix certain pay scales as authors as manual workers do.

Even though Springer agreed with the principle that “the author should have the same share of the profit (of a publishing enterprise) as the publisher,” he spoke only of his inclination in this direction and added:

It frequently happens, even when the chances for profit are identical, that the author feels at a disadvantage because he knows that the publisher lives in good material conditions, while he has to worry deeply. However, he forgets firstly that, as a scientist, he has chosen a profession with other advantages than the businessman has, and secondly he overlooks that the publisher becomes a wealthy man not from one book, but from a large number of successful books.

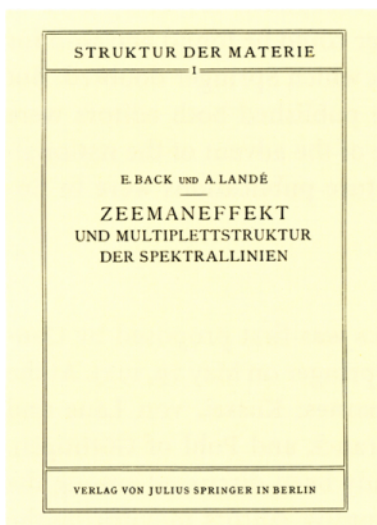
Göttingen's success in attracting young physicists and mathematicians, which extended far beyond the frontiers of Germany, was due not least to the close contact of the academic teachers among themselves and with their students. Joint seminars were the order of the day: Born and Franck would discuss recent publications in atomic physics, while Hilbert and Courant together conducted a seminar on the structure of matter, in which foundations and aspects of modern physics were discussed.

At the beginning of January 1924 Springer arranged with Born and Franck to publish a collection entitled *Struktur der Materie in Einzeldarstellungen* (Collected Papers on the Structure of Matter), and on February 22, 1924 he sent them draft contracts for editors and authors. At an anticipated print run of 2000 copies they were to choose between three alternative royalties:

- 18 % of net price of the paper-bound edition, payable at once after publication
- 150 goldmark per sheet (16 pages), payable after publication
- 22 1/2 % of the sales by quarterly payments.

The first two proposals corresponded roughly to a royalty of 12 % of list price. But they differed quite fundamentally: at 18 % of net price the royalties depended on the price charged by the bookseller. On the other hand, if royalties were calculated in terms of sheets (or pages) the author could depend on a fixed amount, which would increase once 2000 copies had been sold.

Struktur der Materie
(*The Structure of Matter*)



261, 262 Cover of the first volume of the series *Struktur der Materie* (Structure of Matter) (1925) and the title page of the 15th volume, by Hertha Spöner (1895–1968), *Molekülspektren* (Molecule Spectra) (vol. 1: Tables). She had been James Franck's assistant in Göttingen since 1922, advancing to titular professor in 1932. For political reasons she emigrated to Oslo in 1933 where she finished the book. The second volume was published by Springer in 1936. It was dedicated to "My teacher and friend James Franck", who himself had emigrated in 1933 and whom she married in 1946.

With the third alternative the author would get about 15.75 % of the bookshop price, but he had a share in the risk if sales were only moderately good, and he would be paid different amounts every three months.

Only two volumes appeared in 1925. As no further manuscripts were expected, Springer wrote to Courant, who had come into the project as an adviser: “We are making absolutely no progress with the Born and Franck collection... I have the impression that the two editors must press their contributors more firmly, and I would be very grateful to you if you would, as an experienced editor yourself, give them appropriate advice” (September 26, 1925). But Courant saw no reason for concern. Franck (he replied) was in England at the moment and Born was preparing for a trip to the United States but was about to write “a kicking letter to the various people.” Courant also reminded Springer that mathematics series needed a long starting time.

When only 13 volumes had come out by 1931, Springer prodded again. On June 23, 1931 he advocated with “all firmness that in future we should not restrict ourselves only to German authors, but should also approach the best foreigners.” He expressed readiness to publish their work in the original language: this would considerably widen the circle of authors. But he was strictly against publication in translation of previously published books. “In this case the German book would fail in the world market, and sales in Germany are not enough to cover the production costs.”

Born replied by return of post on June 26 that he and Franck were convinced “that with rare exceptions for every area of physics an expert of the first order could be found and won for the series in Germany,” a remark which Springer doubted. But before another volume could be published both editors were forced to leave Germany because of the advent of the national-socialist regime, and all their future publications were in English.

A Rapid-Action Project:
Handbuch der Physik

A Handbook of Modern Physics was first proposed by Courant in a letter to Ferdinand Springer on May 29, 1923. At the same time he proposed some names: Kossel, von Laue and Regener, in addition to Born, Franck and Pohl of Göttingen. Apparently the project had already been discussed among the Göttingen physicists. The presumptive editors met during the

summer of 1923 in Göttingen, Bonn and Stuttgart. The detailed plan was to be ready by October 15, 1923, but the editors were not really enthusiastic about it. They were deterred by the expected administrative load. Born openly confessed in a letter to Springer, on October 10, 1923: "I find such organisational work quite difficult and not at all in line with my abilities, and I am beginning to fear that I am not up to this task." He also thought (letter of October 26, 1923) that he could judge "the suitability of colleagues for such work in only a very few areas with which I am familiar."

However, both he and Franck participated as authors. In letter to Springer (October 14, 1924) he referred again to their first discussion in 1923, but the situation was changed now, "insofar as we scholars again receive so much salary that a literary sideline is no longer absolutely necessary for us. For this reason [!] many colleagues are quite sceptical towards the Handbook and consider it to be more a burden on German physics than serving as its promotion, because it absorbs much energy and detracts from research. I cannot myself completely ignore this argument."

There was now some urgency, because it became known that Vieweg was planning to bring out a new edition of his textbook of physics by Müller and Pouillet, at that time the most extensive work of its kind with a tradition dating back to the 1840s. The 10th edition had been published in six parts between 1905 and 1914 and was thus outdated by the early 1920s. (The new edition came out between 1925 and 1934, as five volumes in 13 parts.) A multi-volume *Handbuch der Experimentalphysik* was also in preparation, to be published by the *Akademische Verlagsgesellschaft* in Leipzig under the editorship of Wilhelm Wien, who had been awarded the Nobel Prize for Physics in 1911. It appeared in 26 volumes of 44 parts between 1926 and 1937.

It was thus essential for Springer-Verlag to publish the first few volumes of its Handbook as quickly as possible, because lively competition between the three works was to be expected. At the end of 1923, when it appeared that none of the originally expected editors were under contract, it was fortunate that Karl Scheel, who had been the last one to be won over as co-editor, declared himself ready to take over, as sole editor if absolutely necessary. As he wrote to Springer on January 2, 1924, he would seek help wherever he could find it.

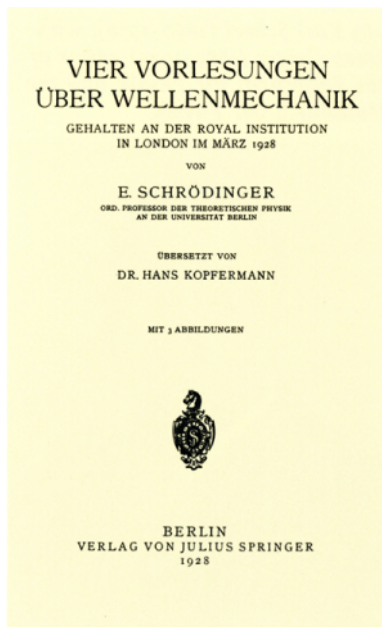
In April 1924 Hans Geiger agreed to be co-editor. Now planning really started. In the summer of 1924 six editors were found

263 Karl Scheel (1866–1936), with Hans Geiger (1882–1945) editor of the *Zeitschrift für Physik* and the *Handbuch der Physik*.



264 Book review by Richard von Mises, in the *Zeitschrift für angewandte Mathematik und Mechanik*, of the *Handbuch der Physik*, reprinted in a large prospectus for the *Handbuch*. In it von Mises praised the “new kind of plan” for its contents, the uniform level of its contributions, the technical design, and the regularity with which the series was being published.

265 The Austrian Erwin Schrödinger (1887–1961) was in 1928 appointed Max Planck’s successor in Berlin. In 1933 he emigrated to England. His work on wave mechanics, which he began in 1926, won him the Nobel Prize (shared with Paul Dirac) in 1933. In 1928 Springer published the German translation of his *Four Lectures on Wave Mechanics*, held at the Royal Institution in London in March 1928.



Unter den zahlreichen größeren Erscheinungen auf dem Gebiete der Physik, die zurzeit verbreitet werden, gehört das Springersche *Handbuch* zweifellos zu den bedeutendsten. Stellt es doch überhaupt eines der umfassendsten literarischen Unternehmungen dar, die jemals auf diesem Gebiete eingeleitet wurden. Gegenüber der älteren Form physikalischer Handbücher wie des *Winkelmännchen* oder des von Müller-Pouillet, wie auch gegenüber den Physikbänden der „Enzyklopädie der mathematischen Wissenschaften“ ist hier ein ganz neuartiger Plan mit großer Umsicht entworfen worden. In 24 Bänden, von denen jeder ein abgeschlossenes Ganze für sich bildet, wird der Gesamtbereich der heutigen Physik von etwa zweihundert Verfassern dargestellt, die, wenn auch die Spitzen der älteren Generation fehlen, ausnahmslos zu den bedeutendsten heutigen Forschern zählen. Die einzelnen Aufsätze halten die Mitte zwischen einer breiten lehrbuchmäßigen Darstellung und der Form, wie sie etwa größere zusammenfassende Berichte in Zeitschriften aufweisen. Bewundernswert ist die relativ hohe Gleichmäßigkeit, die sich in den Beiträgen zeigt, und die einerseits von der guten und gründlichen Schulung der heutigen deutschen Physiker, andererseits aber auch von dem seltenen Geschick und der aufopferungsvollen Herausgeberarbeit der Hauptredakteure Geiger und Scheel Zeugnis ablegt. Daß die buchtechnische Ausstattung der Bände allen billigen Anforderungen genügt, ist bei einem Verlag wie dem Springerschen selbstverständlich. Als seine größte Leistung muß es aber angesehen werden, mit welcher Pünktlichkeit und Regelmäßigkeit die Bände erscheinen, so daß aller Voraussicht nach dieses *Handbuch* von dem Schicksal so vieler ähnlicher Sammelwerke, bei seiner Beendigung schon veraltet zu sein, bewahrt bleiben wird. Und das will bei den Riesenschritten, mit denen die heutige Physik fortschreitet, viel heißen.

for the 24 volumes and contributors’ contracts were ready within a few months. The first manuscript to be received was by the astrophysicist Erwin Finlay Freundlich, and two volumes were ready for production at the end of 1925. Eight volumes were published in 1926, another eight in 1927, a further five in 1928, and the last three in 1929, completing the 24-volume set at a time when the competition had brought out only half of their projects.

The print-run, estimated in the summer of 1924 to be at most 2000 copies, had in the end risen to 2200. The last three volumes, edited by Hans Geiger, sold best of all. They were also the most up-to-date ones: *Elektronen; Atome; Moleküle* (Electrons; Atoms; Molecules) (Vol. 22), *Quanten* (Quanta) (Vol. 23), and *Negative und Positive Strahlen; Zusammenhängende Materie* (Negative and Positive Rays; Connected Matter) (Vol. 24). These three volumes came out in a revised second edition of six parts in 1933.

The publication of the *Handbuch der Physik* on schedule generated great respect among scientists. After all, Geiger and

Scheel had, with the help of their six volume editors managed to motivate 163 authors to deliver their contributions on time. The excellence of their choices can also be judged by the fact that ten of the contributors were subsequently awarded Nobel Prizes: Max Born (1954), Walther Bothe (1954), James Franck (1925), Otto Hahn (1944), George von Hevesy (1943), Otto Meyerhof (1922), Wolfgang Pauli (1945), Chandrasekhara Raman (1930), Erwin Schrödinger (1933) and Fritz Zernike (1953).

Springer-Verlag had been developing a significant publishing programme in medicine from the beginning of the twentieth century. It quickly achieved recognition in the 1920s, thanks mainly to the large-scale Handbooks, the medical *Zentralblätter* (Central Abstract Review Journals), the journals and, not least, the many books on the practice of medicine in its many areas. More than a third (35.6 %) of the 5426 books published between 1920 and 1932 were medical. Quite a few titles were from J. F. Bergmann and August Hirschwald, publishing houses acquired by Springer-Verlag. As a result, within a few years Springer-Verlag had become the leading German medical publisher and subsequently was active across the entire spectrum of medical science and practice. Just to list the 35 individual subject areas into which the medical publications are divided in the firm's catalogue would be exhausting for the reader. Only a few focal areas will be emphasised here.

In addition to the large Handbooks that have been mentioned, books for the doctor in practice formed a special feature of the list. Shortly before outbreak of the First World War Springer had, at great expense, started publication of the *Enzyklopädie der inneren Medizin* (Internal Medicine), edited by Leo Langstein, Carl von Noorden, Clemens von Pirquet and Alfred Schittenhelm (see p. 179). Four titles came out before the war and 15 more between 1919 and 1931. It was a rather heterogeneous collection, also containing two textbooks (Schittenhelm's *Röntgendiagnostik* and Wildbolz's *Urologie*). Schittenhelm's two-volume *Handbuch der Krankheiten des Blutes und der blutbildenden Organe* (Diseases of the Blood and the Blood-forming Organs) also came out as part of this series.

Fachbücher für Ärzte (Teaching Books for Medical Practitioners), its 14 volumes edited since 1922 by the editors of *Klinische Wochenschrift*, ceased publication in 1931. The most successful of these books was Max Lewandowsky's *Praktische Neurologie*

The Medical Programme

266 In 1914 Felix Lewandowsky had finished his book on cutaneous tuberculosis within the section on tuberculosis of the *Enzyklopädie der klinischen Medizin*. But because of the war it was not published until 1916 (the title page is shown here).

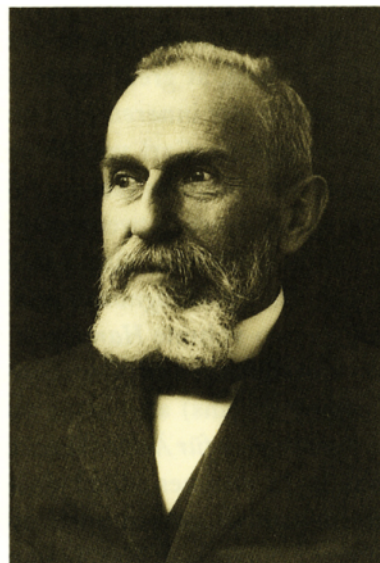
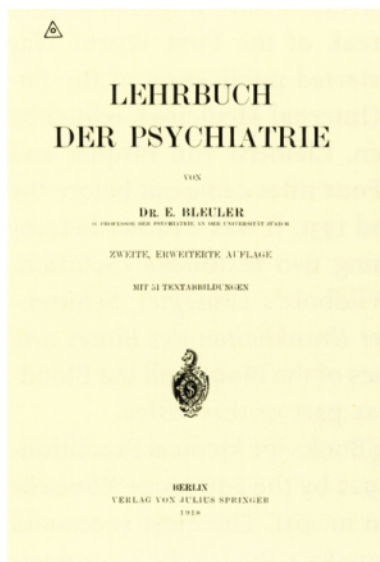


für Ärzte, which went through four editions. Springer-Verlag Wien brought out two low-price series for young doctors and student: *Aus den internationalen Fortbildungskursen der Wiener medizinischen Fakultät* (From the International Postgraduate Courses of the Medical Faculty in Vienna), comprising altogether 117 booklets of 36 pages at most, and *Bücher der ärztlichen Praxis* (Books for Medical Practitioners), a series in which 43 volumes (up to 240 pages each) appeared between 1928 and 1936.

Springer-Verlag had first published medical books towards the end of the nineteenth century: Max Runge's *Lehrbuch der Geburtshülfe* (Textbook of Midwifery) from 1891, and *Lehrbuch der Gynaekologie* from 1902. Before 1914 there had been textbooks of neurology (Hans Curschmann, from 1909), child health (Bruno Salge, from 1909), cardiology (the German translation of James Mackenzie, from 1910) and diathermy (Franz Nagelschmidt, from 1913). To this day the most successful textbook has been Eugen Bleuler's *Lehrbuch der Psychiatrie* which first appeared in 1916 and, now in its 15th edition (1983, with more recent revised reprints), is being continued by his son. Rudolf Höber's *Lehrbuch der Physiologie*, first published in 1919, was hardly less successful, with seven much enlarged editions, until 1934, when further publication was banned by the national-socialist regime after the author had emigrated (see p. 339). Its successor was the textbook by Hermann Rein: seven editions

267 Ernst Bleuler's *Lehrbuch der Psychiatrie* (Textbook of Psychiatry), title page shown here, first published in 1916. It still carries his name and is now in its 18th edition.

268 Bleuler (1857–1939) had a professorship in Zurich from 1898 to 1927 and was director of the Heilanstalt Burghölzli. He coined the term *schizophrenia*.





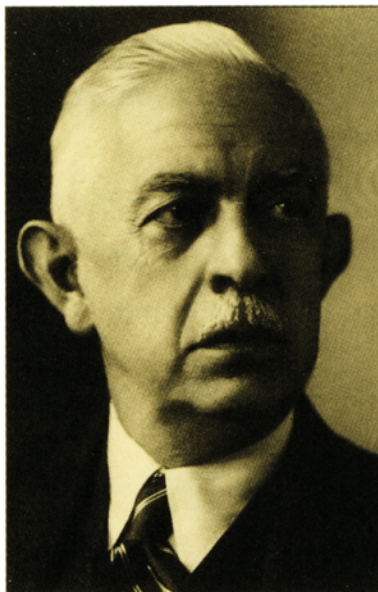
269, 270 Title pages of *Grundriß der Augenheilkunde* (Fundamentals of Ophthalmology) by Franz Schieck and *Grundriß der inneren Medizin* (Fundamentals of Internal Medicine) by Alexander von Domarus, both written as textbooks for students and doctors. The 24th edition of the former, now edited by Wolfgang Leydhecker, was published in 1990. The last edition of the book by von Domarus, the 22nd, was published in 1957.

appeared between 1936 and 1943.⁵⁴ Franz Schieck's *Grundriß der Augenheilkunde* (Fundamentals of Ophthalmology) was also published in 1919. It is now in its 13th edition, under Wolfgang Leydhecker. The most successful textbook of those years was *Grundriß der inneren Medizin* (Fundamentals of Internal Medicine) by Alexander von Domarus (1923), of which there were 22 editions up to 1957, under Hans Freiherr von Kreß from 1945.

Numerous textbooks came into the Springer list after J. F. Bergmann Verlag had been taken over, for example *Geisteskrankheiten* (Mental Diseases) by Bumke; *Geburtshilfe* (Obstetrics) by Bumm; *Anatomie* by Corning; and *Pathologische Anatomie* by Schmaus and Herxheimer. The acquisition of F. C. W. Vogel Verlag in 1931 brought textbooks on pathological histology by Borst, surgery by Garrè/Borchard, dermatology and venereal disease by Lesser/Jadassohn, general pathology and pathological anatomy by Ribbert/Sternberg/Hamperl⁵⁵, and special pathology and treatment of medical diseases by Strümpell/Seyfarth. Springer-Verlag was not put off publishing several textbooks in the same subject, as occurred from the acquisition of other publishing houses, because they were usually well established books. Only rarely were they in competition with Springer's own programme, because heads of department usually had clear-cut preferences (also depending on their "Schools"). The name of the publisher was less decisive than the price that students were prepared to pay.

271 Gustav von Bergmann published a *Lehrbuch der inneren Medizin* (Textbook of Internal Medicine) in two volumes.

272 Oswald Bumke, originally an author of the J. F. Bergmann publishing house, edited the *Handbuch für Geisteskrankheiten* (Handbook of Mental Diseases) together with Otfried Foerster from 1928 until 1939. Jointly with Foerster he also edited the *Handbuch für Neurologie* from 1935 until 1940.



It may indeed be doubted whether some of these textbooks – usually subtitled “for students and doctors” – will have been used as textbooks by students. In view of their size and price they will rather have appealed to the postgraduate practitioner and the university lecturer. They were really encyclopaedic reference books, more like small Handbooks, such as the two-volume *Lehrbuch der inneren Medizin* by Gustav von Bergmann which, with 1700 pages, cost 50 mark (too much for most students). The same was probably true of Jochmann and Hegler’s *Lehrbuch der Infektionskrankheiten* (Infectious Diseases), which had more than 1000 pages and cost 54 mark. It was certainly the case with *Anatomie des Menschen* (Human Anatomy) by Braus and Elze, a “Textbook for Students and Doctors”, which cost 128 mark.

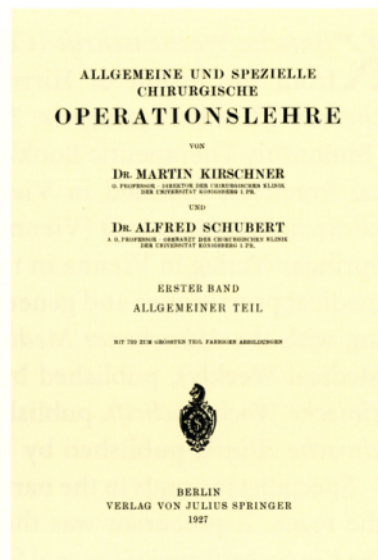
Surgery **E**ven before World War I Springer-Verlag was in a strong position in surgical publications. After a short interruption, caused by the war, *Ergebnisse der Chirurgie und Orthopädie* (Results in Surgery and Orthopaedics) was again published annually, consisting of 600 to 800 pages, under the editorship of Erwin Payr (Leipzig) and Hermann Küttner (Breslau). The *Zentralorgan für die gesamte Chirurgie und ihre Grenzgebiete* (Central Organ for all of Surgery and its Allied Subjects), founded in 1913, provided an opportunity to forge closer relations with the *Deutsche Gesellschaft für Chirurgie* (German

Society for Surgery) (see p. 182 f.). After having taken a share in J. F. Bergmann Verlag in 1918 the *Jahresbericht über die Fortschritte auf dem Gebiete der Chirurgie* (Annual Report of Advances in Surgery), founded in 1898, was looked after by Springer-Verlag. In addition there were the *Verhandlungen der Deutschen Gesellschaft für Chirurgie* (Proceedings of the German Society for Surgery), from 1922, which included the talks and subsequent discussions at the Society's annual meeting in Berlin in April. This congress report had been published by August Hirschwald since 1872, the year the society was founded in Berlin. Springer incorporated it into the *Archiv für klinische Chirurgie* (also taken over from Hirschwald), which had been founded by Bernhard von Langenbeck in 1860 and would now become the organ of the congress of the German Society for Surgery.

With these publications Springer brought together the most important surgical periodicals in his firm.

There were several advantages for the publishing house from this constellation. Ferdinand Springer was able to inform himself, through the editorial boards, about the professional advances and organisational moves within surgery, as well as to obtain suggestions for his book programme and form or cultivate contacts with authors. He was now also able to assume that the names would have a positive effect on the readership and guarantee the quality of the publishing programme [KLOEPFER: 20].

A contract made with the *Deutsche Gesellschaft für Chirurgie* (German Society for Surgery) in 1926 shows just how close was



273, 274 Martin Kirschner (1879 to 1942), whose career took him from Königsberg (1911) via Tübingen (1927) to Heidelberg (1933), jointly with some fellow surgeons published a multivolume text on surgical operations between 1927 and 1940. A new edition, still bearing his name, has appeared since 1950.

the relationship between society and publisher: all members were to receive, free of charge, the congress report of between 700 and 900 pages. Only packing and postage had to be paid. In return the Hirschwald bookshop (owned by Springer-Verlag) had the sole right to exhibit (and sell) scientific books at the annual congress. It was stipulated that books from other German medical publishers were also to be exhibited, this arrangement to be supervised by the society (and presumably also the competitors!). In 1929 the Hirschwald bookshop was even asked to take over the society's administration. In view of this close connection it is not surprising that Springer became the leading publisher in surgery that year.

Martin Kirschner (professor of surgery, in Tübingen 1917 to 1934, in Heidelberg until his death in 1942), who was co-editor of *Ergebnisse*, was also the executive editor of *Allgemeine und spezielle chirurgische Operationslehre* (Textbook of General and Special Surgical Operations), published between 1927 and 1940 in seven volumes. It was revised and continued under his name after World War II. In 1927 Springer-Verlag published *Chirurgische Operationslehre* (Textbook of Surgical Operations) by Otto Kleinschmidt. A *Lehrbuch der Chirurgie* (Textbook of Surgery), by Carl Garrè and August Borchard, started by F. C. W. Vogel in 1920, has been continued by Springer since 1933, under the editorship of Rudolf Stich. Yet another *Lehrbuch der Chirurgie*, in two volumes, was published in 1930 by Springer-Verlag Wien, with Wolfgang Denk as editor.

A Journal for Medical Specialists **K**linische Wochenschrift (Clinical Weekly), resulting in 1921 from the fusion of Hirschwald's *Berliner klinische Wochenschrift* with Springer's *Therapeutische Halbmonatshefte* (Bimonthly Therapeutic Booklets), and *Ärztliche Praxis* (Medical Practice), founded in Vienna in 1927, as well as *Wiener klinische Wochenschrift* (Vienna Clinical Weekly), taken over by Springer-Verlag in Vienna in 1924, addressed themselves to the medical practitioner and general physician. They were competing with the *Münchener Medizinische Wochenschrift* (Munich Medical Weekly), published by J. F. Lehmann, *Deutsche Medizinische Wochenschrift*, published by Georg Thieme, and *Medizinische Klinik*, published by Urban & Schwarzenberg.

Specialist journals in the narrow sense have existed only since the 1920s. A precursor was the Springer periodical, *Zeitschrift für Kinderheilkunde* (Journal for Child Health), founded in 1910.



275, 276 Otto Kleinschmidt (left) and Otto Nordmann (right), together with Martin Kirschner edited the new specialty journal, *Der Chirurg*, with Arthur Hübner as executive editor.

The specialist had little time to inform himself about the numerous publications on basic research. He was interested in information that was applicable to his work, case reports from daily practice, description of new ways of treatment, use of new appliances and materials. None of the weeklies already mentioned adequately fulfilled his needs.

During the war, doctors working in field hospitals had to work largely in surgery. This promoted in some the wish to specialise after the war, either as an independently practising surgeon or as a surgeon in a regional hospital.

Springer-Verlag's reputation among surgeons and its large pool of potential authors provided a firm basis for starting a journal addressing itself to such needs. Planning for *Der Chirurg*⁵⁶ started in the spring of 1928 and all the signs indicate that Ferdinand Springer himself was its initiator. On the last evening of the Surgical Congress in Berlin he had arranged a discussion with three of the intended senior editors: Martin Kirschner, professor in Tübingen, was the driving force, together with Otto Kleinschmidt, chief of the Surgical Clinic at Wiesbaden (like Kirschner a pupil of Erwin Payr), and Otto Nordmann (chief of the Surgical Clinic at the Auguste Viktoria Hospital in Berlin). As is clear, surgeons in daily practice predominated. Arthur Hübner, a lecturer in surgery in Berlin, became the managing editor.

There was to be a board of specialists, to advise and help in the search for suitable authors. It was also useful to have well-known surgeons committed to the new journal, especially if they come from other "Schools." At the beginning this advisory

board comprised Eugen Enderlen (Heidelberg), Gustaf Petré (Lund), Rudolf Stich (Göttingen) and Georg August Wagner (Berlin). More joined later: Georg Axhausen (Berlin), Harvey Williams Cushing (Boston), Carl Franz (Berlin), Nikolai Guleke (Jena), Karl Henschen (Basel), Rudolf Klapp (Marburg), Fritz König (Würzburg), Werner Körte (Berlin) and Erwin Payr (Leipzig). Ferdinand Springer had clearly managed to win several of the most renowned representatives of German surgery and a few important foreigners. But neither Ferdinand Sauerbruch nor August Borchard, the main representatives of the Billroth School, were among them, nor was Viktor Schmieden (Frankfurt), because they were tied to their "own" journals

Postverlagsort Leipzig

DER CHIRURG

ZEITSCHRIFT FÜR ALLE GEBIETE DER OPERATIVEN MEDIZIN

HERAUSGEGEBEN VON

<p>PROF. DR. M. KIRSCHNER DIREKTOR DER CHIRURGISCHEN UNIVERSITÄTSKLINIK TÜBINGEN</p>	<p>PROF. DR. O. KLEINSCHMIDT DIREKTOR DER CHIRURGISCHEN ABTEILUNG DES STÄDT. KRANKENHAUSES WIESBADEN</p>	<p>PROF. DR. O. NORDMANN DIREKTOR DER CHIRURGISCHEN AB- TEILUNG AM AUGUSTE - VICTORIA- KRANKENHAUS BERLIN-SCHÖNBERG</p>
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E. ENDERLEN-HEIDELBERG · C. FRANZ-BERLIN · N. GULEKE-JENA · K. HENSCHEN-BASEL
R. KLAPP-MARBURG · W. KORTE-BERLIN · E. PAYR-LEIPZIG · E. G. PETRÉN-LUND
R. STICH-GÖTTINGEN · G. A. WAGNER-BERLIN

SCHRIFTLEITUNG: PRIVATDOZENT DR. A. HÖBNER, BERLIN	VERLAG: JULIUS SPRINGER, BERLIN UND WIEN
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HEFT 1	1. NOVEMBER 1928	1. JAHRGANG
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Abkürzung des Titels dieser Zeitschrift für
Literaturnachweise (laut Verzeichnis der
Vereinigung der medizinischen Fachpresse):

(Chir.)

277 The first issue of *Der Chirurg*. To launch it Springer-Verlag sent out 32,000 copies as free samples to surgeons in Germany and abroad. In 1943 the journal had 3,500 paid subscriptions.

or were in opposition to the “Leipzig School” of Erwin Payr, which had several of its members on the board.

Nonetheless, the editorial board tried, especially in the planning phase, to bring in competing surgeons. Characteristic of this attempt is a letter by Kirschner to Hübner on April 28, 1928: “If I were you I would ask him [Sauerbruch] on your behalf to let us have, if at all possible, a short contribution from his most valuable pen; it would be a special honour for us to place it prominently in the first issue. (We can give this promise very firmly, because he won’t write anything, even if he were to promise it.)” Sauerbruch, together with Borchard, was senior editor of the *Centralblatt für Chirurgie* (Central Periodical for Surgery), published by J. A. Barth, and of the *Deutsche Zeitschrift für Chirurgie*, published by F. C. W. Vogel. It is, therefore, not surprising that he was not open to offers by journals felt to be competitors. Furthermore, his contact with Springer had cooled, because there had been disputes over the publication of the two-volume editions in 1920 and 1925 of his book *Chirurgie der Brustorgane* (Surgery of the Thoracic Organs).

The response to the first announcement of the new journal was overwhelmingly positive. A more practice-oriented approach was welcomed as it was missing from existing surgical journals – not excluding those published by Springer-Verlag. As Prof. Erwin Kreuter of Nuremberg wrote, if one “is not burdened by the mass of literature which is no longer manageable, one may be more willing to write up one’s own experience.” On the other hand, Erich Lexer, professor of surgery in Munich, was against the publication of another journal in view of the “incredible accumulation of the surgical literature.”

Supported by a wide promotional campaign – 32,000 complimentary copies of the first three issues were sent out – *Der Chirurg* had about 2000 subscribers after two years. Its further development has been described in detail elsewhere [KLOEPFER; SARKOWSKI (3)].



278 Technik der Thoraxchirurgie, written jointly by Ferdinand Sauerbruch and Emil Dagobert Schumacher and first published in 1911, had 100 pages. The new editions in 1920 (title page shown here) and 1925, now entitled *Die Chirurgie der Brustorgane* (Surgery of Thoracic Organs), were two-volume, multi-author works of over 2000 pages.

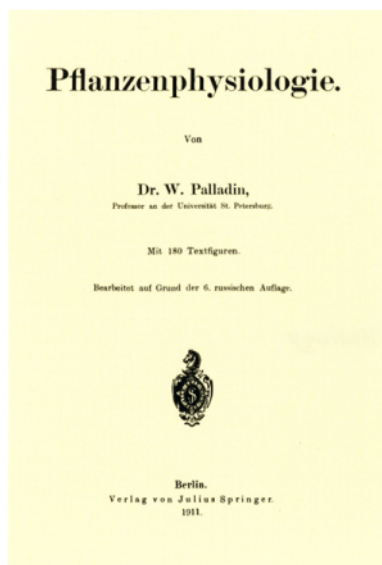
While Ferdinand Springer’s particular interest was in the *Biology* natural sciences, he loved biology, especially botany. As he mentioned in his talk to the Rotary Club in 1952 (see p. 164 f.), it was his only hobby-horse. After Fritz von Wettstein, from 1934 Senior Director of the Kaiser-Wilhelm Institute for Botany in Berlin-Dahlem, visited Springer’s garden in Pichelsdorf (a small suburb in the west of Berlin), he wrote to him [May 27, 1937]:

279 Russian physiologists and biochemists were well represented in the Springer programme, both before and after the Russian revolution [CHOLDIN]. Alexander W. Palladin (1859–1922) published his famous book on the physiology of plants, *Pflanzenphysiologie*, with Springer-Verlag (photograph from 1888).

280 Sergius Kostychev translated Palladin's book. His own two-volume *Lehrbuch der Pflanzenphysiologie* was published in 1926 and 1931 by Springer-Verlag.



281 Title page of Palladin's book. It took just nine months between signing of the contract and publication.



“Despite Průhonice and Koponiště.⁵⁷ I have not seen a garden that has been created with such love, such feeling for plants and has achieved such a consummate artistic effect. It has utterly impressed me.”

With this strong personal inclination it was quite natural for Springer to become an active publisher in biology. A chance encounter helped at the start. Emil Fischer had referred Springer to his assistant Emil Abderhalden. (The *Biochemische Handbuch*, published between 1911 and 1933 in 16 parts was one result of this contact [SARKOWSKI (9): 4ff.]). Abderhalden, in turn, suggested to Springer that he take up contact with the Russian biochemist Alexander W. Palladin whose *Plant Physiology*, first published in Russia in 1891, was now in its 6th edition. As there was no equivalent book in Germany, Springer wrote to Palladin on December 29, 1910 to ask whether he would agree to a German translation. Palladin agreed and the German edition appeared just nine months later.

The connection with this influential biochemist bore fruit in other respects, because Russian biologists had early on begun to include biochemical research in their work and had thus given modern plant physiology its real foundation. Springer published Vladimir Lepeshkin's *Lehrbuch der Pflanzenphysiologie* in 1925 and, soon after (1926/31), a two-volume textbook of plant physiology by Sergius Kostychev, one of the translators of Palladin's book. Later there were publications by other Russian plant physiologists, e. g. Boris Petrovich Babkin (Pavlov's assistant for several years) and Alexander Gurvich, discoverer of mitogenic radiation.

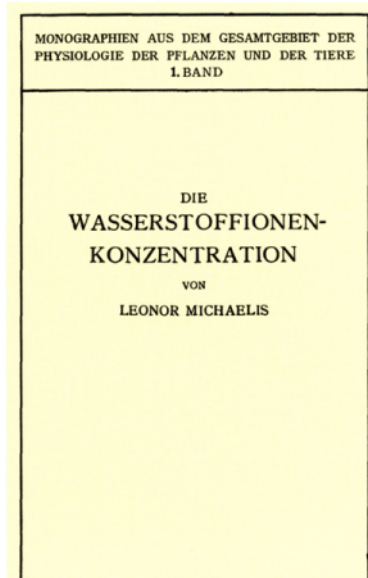
In the late summer of 1913 Jakob Parnas (1884–1948), born in Galicia (Poland, at that time part of the Austro-Hungarian Empire) but then a lecturer in Straßburg (as it was then called), had proposed a series of biochemical and physiological monographs to Springer, detailing the project in a letter to Springer on September 28, 1913). He mentioned a number of topics and possible contributors. As he himself was a biochemist he suggested bringing in two plant physiologists, perhaps Friedrich Czapek (Prague) and Martin Gildemeister (Straßburg). As a first step Springer sounded out his friend, the pharmacologist Wolfgang Heubner, who had been co-editor of *Therapeutische Monatshefte* (Monthly Therapeutic Booklets) since 1910. He reported back that Carl Neuberg and Fritz Oppenheimer had some time ago spoken to him about just such a project. “It is obviously something that is in the air.” Heubner thought it was an excellent idea, but wondered whether the largely unknown Straßburg lecturer “would be able to persuade the excellent people on his list to write for him what he wants.”

Soon afterwards Czapek agreed to be co-editor, but Gildemeister merely wanted to be an “advising co-editor.” After the usual exchanges Emil Godlevsky (Cracow) was eventually secured as additional co-editor. Carl Neuberg was nominally part of the editorial board, but he did not want to be bound contractually and took no part in choosing the topics. The managing editors were Parnas and Czapek.

It was planned to bring out a series of monographs covering the entire area of physiology of plants and animals, from the borders with chemistry and physics to experimental morphology and genetics. International participation was indicated, because there were not enough qualified scientists in Germany. Springer rejected translations of already published work, but would accept them if they came out simultaneously.

The “Vieweg Collection” had been announced in the summer of 1913. Although it was meant for a wider public, there was the danger that Springer would have to do without authors who were already under contract with Vieweg. One had to act quickly. *Die Wasserstoffionkonzentration* (Hydrogen Ion Concentration) by Leonor Michaelis came out, as Vol. 1, at the beginning of July 1914, and there had been discussions about more than 80 other titles. But then war broke out and no further thought could be given to major projects. In the meantime Parnas, at the time a visiting professor in Warsaw for the winter term 1916/17, had been sent a manuscript by Hans Winterstein (Rostock) of

282 Cover of the first volume in the series of Monographien aus dem Gesamtgebiet der Physiologie der Pflanzen und der Tiere (Monographs from the Entire Field of Physiology of Plants and Animals). The volume by Leonor Michaëlis on hydrogen ion concentration came out just one month before the outbreak of World War I. It was reprinted in 1922 and 1923.





283 Jakob Parnas (1884–1948) had suggested the monograph series in 1913 and was its chief editor until the end of 1933. In addition he was co-editor of *Mikrochimica Acta*, founded in 1937 by the Vienna Springer-Verlag, until 1938.

Die Narkose in ihrer Bedeutung für die Physiologie (Anaesthesia: Its Significance for Physiology), amounting to about 320 printed pages. As Michaelis' book consisted of over 200 pages and the third volume (its manuscript had just arrived) looked like being nearly 400 pages long, one had to reckon with a series of quite sizeable monographs.

When Friedrich Czapek inquired about the future fate of the series on May 3, 1919, Ferdinand Springer told him he was definitely in favour of continuing it. Vol. 2 was already in print and Vol. 3 was with the typesetter. But contact with the editors had become very difficult. The mail from Parnas in Warsaw had to come in a roundabout way and, after he had moved to a chair in Lemberg (Lvov) in the summer of 1920 communication became even more difficult. Similar problems were experienced with Godlevsky in Cracow. He had in the meantime been appointed Commissioner for Epidemics in Poland and had hardly any time for resuming the editorship, which had been in abeyance, and he soon resigned. There may also have been another reason. Cracow, whose university had been founded in 1364 and had Polish as its language even under Austro-Hungarian rule (until 1919), was now looking towards Warsaw. Polish scientists, who had earlier wanted contact with German publishers and avoided relations with Russia, now preferred to work with Polish publishers. This was the case also with Parnas, but he kept his contact with Springer-Verlag through his editorship.

Friedrich Czapek, called to a professorship in Leipzig in 1920, died there in the summer of 1921. New editors had to be found for the physiology series. Czapek was succeeded in 1924 by Wilhelm Ruhland, Director of the Botanical Garden in Leipzig. Richard Goldschmidt, a geneticist, also joined the editorial board. His book on *Ascaris* was later published by Springer (see p. 289 ff.). From now on two to three books came out in the series annually. Having been planned originally as a collection of booklets – before the war Parnas had still been talking of 100–130 pages – it now developed into a series of sizeable monographs of up to 1000 pages.

Parnas resigned as editor on December 25, 1933, but asked that his name be kept on the title pages of the series. He gave his poor health as his reason for resigning and stressed that it was “in no way directed by any political reasons,” but one can assume that there were in fact political motives. He suggested as his successor Karl Thomas, who had “a position secure in all directions.” He added that Springer would know better than he

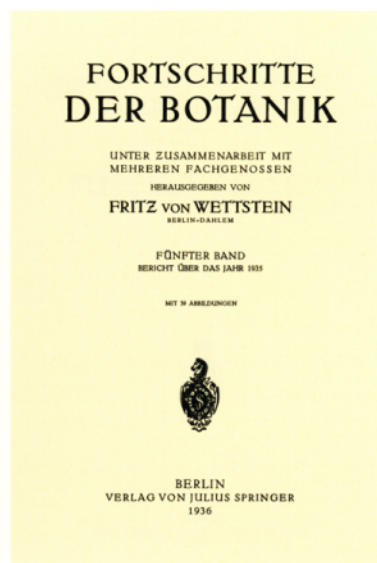
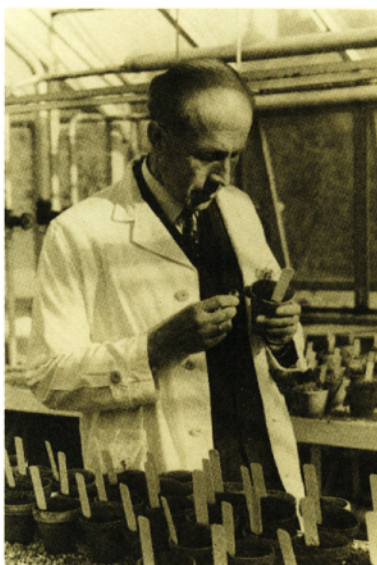


284, 285 Richard Goldschmidt (1878–1958) was appointed professor at the Kaiser-Wilhelm-Institut für experimentelle Biologie in Berlin-Dahlem in 1914. He was an authority on genetics and took chromosomal research into new channels through his work in animals. The title page of his book on the physiology of inheritance, published by Springer-Verlag in 1927, is shown on the left.

whether one could also consider “an emigrant.” If so, Rudolf Höber was the right person. But this was probably merely a rhetorical question. Thomas accepted and suggested Richard Kuhn, a pupil of Willstätter, as successor to Carl Neuberg whose editorship was also coming to an end (see p. 169). But the end of the series could be foreseen. The last volume, *Physiologie des Menschen im Flugzeug* (Physiology of Man in an Aeroplane), was published in 1935. So ended a collection of definitely international character. In addition to world-famous German authors, like Meyerhof and Goldschmidt, Russian authors were particularly well represented: Babkin, Gurvich, Kostychev, Krenke and Lepeshkin. There were also English, Canadian, Scandinavian and Italian ones: Joseph Barcroft, Vincenzo Bisceglie, August Krogh and John James Richard Macleod. Both of the latter received Nobel Prizes for Chemistry (in 1921 and 1923, respectively).

Immediately after World War I Springer had begun systematically to build up the biology programme. He alternated between founding book series and journals. In 1919 he acquired *Vorträge und Aufsätze über die Entwicklungsmechanik der Organismen* (Lectures and Essays on the Developmental Mechanics of Organisms) edited by Wilhelm Roux from Wilhelm Engelmann-Verlag, and continued it until Roux’s death in 1924. A *Neue Folge* (New Sequence), established under the editorship of Hans Spe-

286, 287 Fritz von Wettstein (1895–1945) was director of the Kaiser-Wilhelm-Institut für Biologie in Berlin-Dahlem from 1934. From 1931 onwards he edited *Fortschritte der Botanik* (Progress in Botany) and was also co-editor of *Ergebnisse der Biologie* (Results in Biology).



mann, published for example two articles by Vladislav Ružička who with Adolf Butenandt was awarded the Nobel Prize for Chemistry in 1939. The *Archiv für wissenschaftliche Botanik* (Archive for Scientific Botany), edited by the plant physiologist Wilhelm Ruhland, was founded by Springer in 1924 (the title was changed to *Planta* in 1926). Two years later *Ergebnisse der Biologie* (Results in Biology), edited by Richard Goldschmidt and Karl von Frisch, was founded and appeared in one or two volumes annually. Wilhelm Ruhland, Hans Winterstein and Fritz von Wettstein were co-editors, the latter also co-editor of *Fortschritte der Botanik* (Advances in Botany), begun in 1931. This series had been preceded by *Jahresbericht über die wissenschaftliche Biologie* (Annual Report on Scientific Biology), founded in 1926 and edited by Tibor Péterfi. Others were *Zeitschrift für Morphologie* (1924), *Gartenbauwissenschaft* (Science of Horticulture, 1928) and *Der Züchter, Zeitschrift für theoretische und angewandte Genetik* (The Breeder, Journal for Theoretical and Applied Genetics, 1929).

Verständliche Wissenschaft
(Understandable Science)

It is natural that publishers of scientific literature are somewhat annoyed when some of their authors are successful in writing popular presentations brought out by trade publishers and achieving high sales, while this fails to happen with their strictly scientific books. Thus, *Du und das Leben* (You and Life), by Karl von Frisch (1937 and many later editions) was published by Ullstein with sales of several hundred thousand copies, while

a similar book published by Springer or any other scientific publisher could never have matched such results. There are many good reasons for this difference:

Scientific publishers are as a rule known only to the relevant professional readership. Booksellers know their market, its opportunities and its limits. Only a few hundred bookshops world-wide sell scientific books. Springer-Verlag, for example, obtained 90% of its revenue from 319 firms³¹. On the other hand, trade publishers in the German-speaking countries can theoretically count on 6000 retail booksellers. Equally, they have other forms of promotion and distribution at their disposal. For example, an important factor in the distribution of trade books is the publisher's sales representative who makes new publications of his publishing house known to several hundred bookshops each year. (Springer-Verlag started this system for its own books in 1972.)

But it is not only with regard to promotion and distribution that the trade publisher differs from the scientific one. The preparation of the manuscript for a wide readership through close co-operation between author and in-house editor is essential for success, as is close collaboration with the production department in the selection and design of illustrations, typography and the choice of format and paper. Not least important is the choice of a catchy, effective title.

However, there were only a few scientists at that time who, in addition to their research and teaching tasks, wanted to write for a wider public. Some may have feared that it could harm their reputation as a scientist ("What will my colleagues say?"). Even those who had no such inhibitions often failed to appreciate the difficulties in simplifying complicated matters. Little has changed here in this respect.

Ferdinand Springer was keen to have a popular book series and in the biologist Richard Goldschmidt he found an enthusiastic partner for his plans. Although a highly specialised geneticist, Goldschmidt possessed unusually thorough knowledge in many branches of the natural sciences. Beyond that, he had a gift for presenting scientific advances (not only his own) in a way that made them understandable and interesting to the general public. In 1914 he had been appointed Director of the Third Department of the Kaiser-Wilhelm-Institut für Biologie in Berlin-Dahlem. But he was unable to take up his post and set up an institute for genetics until 1919, having been interned in East

288 Richard Goldschmidt had been guest professor in Japan from 1924 to 1926, and during this period he travelled the territories annexed by Japan since 1895. The illustration shows the dust-jacket (black printing on red paper) of his book recording his impressions of these travels (New Japan: Formosa, Ryukyu and Bonin Islands, Korea, South Manchurian Leased Area).



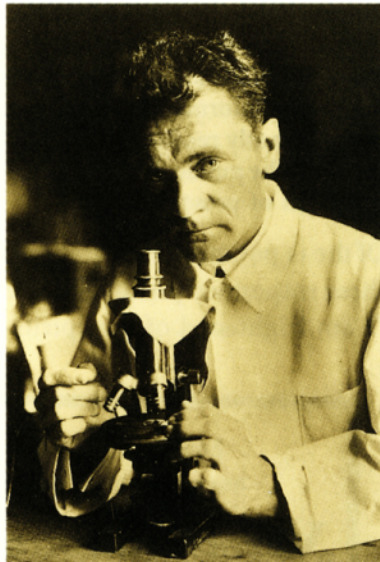
Asia while on a study tour there. In 1920 he published *Die quantitative Grundlage von Vererbung und Artbildung* (The Quantitative Basis of Inheritance and Speciation) with Springer-Verlag. In 1925 he became co-founder of the *Zeitschrift für Zellforschung* (Journal for Cell Research), and in 1926 co-editor, with Karl von Frisch, of *Ergebnisse der Biologie* (Results in Biology). It was planned that his book *Einführung in die Wissenschaft vom Leben oder Ascaris* (Introduction to the Science of Life, or Ascaris) should come out as the first volume of the *Ergebnisse* series. The book had actually been published by the Leipzig publisher Theodor Thomas, but had not attracted much attention. Springer was pleased to accede to the author's wishes and acquired the publishing rights and remaining copies from Thomas.

In March 1927 Goldschmidt succeeded in persuading Karl von Frisch to publish his planned book *Aus dem Leben der Bienen* (Life of the Bees) in the series. Frisch reported on April 27, 1927 that work was progressing well and enclosed a list of contents, which completely agrees with the final book version. On May 18, 1927 Springer detailed the conditions that were also to apply to further volumes of the collection:

The print-run is to be 5000 copies and the price is not to exceed 4.50 (mark) cloth-bound, assuming that there will be around ten sheets (160 pages). For each edition the author is to receive 1500 mark. Considering the print run this is extraordinarily little, but only in this way can the low price be achieved. One has to calculate an average book-trade discount of at least 40 %, because one does not want only scientific booksellers – whom I can influence myself – to be interested in selling it, but also the large number of bookshops which market general literature. However, these bookshops are used to discounts of 40–50 % from belletristic publishers. I would also like to point out that the *Sammlung Götschen* (Götschen Collection), as far as I know, is in general accustomed to paying 500 mark for their little booklets with the same print-run (however, at a list price of only 1.80 mark), such as *Natur und Geisteswelt* (Nature and the World of the Mind) [B. G. Teubner].

Revenues from translations were to be paid to the author undiscounted. As this letter shows, Springer knew the belletristic publishers' terms quite well, and he will certainly have obtained additional information.

From now on Springer had to discuss matters with his editor which hardly every arise with scientific authors. As the format was to be smaller than that of other Springer books, the publisher thought that one should use a smaller type, in view of the narrower column. But his editor disagreed. Springer also made



289, 290 The first volume of *Verständliche Wissenschaft* (Understandable Science) was by Karl von Frisch (1886–1982), *Aus dem Leben der Bienen* (From the Life of the Bees), describing his pioneering work. After Richard Goldschmidt's emigration in 1935 von Frisch took over the editorship of the series.

it a point to read all the manuscripts, something that he had only rarely done with his scientific authors. In one case, for example, he requested correction of the somewhat contrived old-fashioned style. “In some respects it would be a pity. On the other hand, it is probably sufficient to erase an “e” occasionally from the verbal forms, in order to give the book a fully modern character in its language.” The impression should be avoided that “this is a reprint of a book that was modern 100 years ago.” The contemporary reader would have doubts about the timeliness of the contents. In the end the manuscript was rejected.

The first three volumes of the series came out at the end of October 1927. *Das Leben der Bienen* was No. 1, Goldschmidt's *Die Lehre der Vererbung* No. 2, and his *Einführung in die Wissenschaft vom Leben*, in two volumes with consecutively numbered pages, No. 3. It was probably not without good reason that Springer wrote to Goldschmidt “I should be most grateful to you if you would allow me to express my opinion before any final request is made to the author and a topic is assigned. I am firmly convinced that I shall follow your proposal every time, but my wish would seem to be justified, because idealistically I am as much interested in the matter itself as the author and materialistically more so.”

Success was slow to come, especially as only one title was published in 1928 (Dacqué *Das fossile Lebewesen* [The Life of Fossils]). In December 1927 Goldschmidt had approached 12 potential authors and in his letter of invitation quite openly mentioned the difficulties:

We are fully conscious of the fact that writing such a book is very difficult, much more difficult than a scientific presentation. On the other hand, we know from extensive experience ... how great is the hunger for information on the natural sciences, as long as it is offered in a pleasantly readable form. We believe that scientists have an obligation to the public that they should not avoid, as long as they have the lucky gift of presentation.

Of the 12 potential authors who were approached in the end only three responded positively. A few days later Springer confessed: "I am frightened of the spirits that I called up, and of the un-

291 The new series of popular science was widely promoted among the general public, to a degree unusual for Springer-Verlag. The first page of a four-page prospectus is shown here ("As the title states, the series brings the most recent results in the sciences in truly understandable form so that every lay person can understand the presentation and can also read it with pleasure.") The illustration is from Richard Goldschmidt's *Einführung in die Wissenschaft vom Leben* (Introduction to the Science of Life).


Eine neue, in Inhalt und Form auserwählte
Sammlung guter naturwissenschaftlicher Bücher

„Verständliche Wissenschaft“

Aus dem dritten Band: Goldschmidt, Einführung in die Wissenschaft vom Leben.
Darstellung der Art, wie das Material der Geschlechtszellen vom Ei ab reserviert wird. 1 das Ei, punktiert das Geschlechtszellenmaterial, 2 und 3 die Eifurchung, 4 die hohe Kugel mit bereits kenntlichen Geschlechtszellen. 5–11 die weitere Entwicklung bis zum Frosch mit den eingezeichneten Geschlechtszellen (nach Conklin).

Zur Einführung

Wie der Titel „Verständliche Wissenschaft“ besagt, soll die Sammlung, deren erste Bändchen jetzt vorliegen, die neuesten Ergebnisse der Wissenschaft in wirklich verständlicher Form vorführen, so daß ein jeder Laie die Darstellung verstehen und außerdem mit Genuß lesen kann. Die einzelnen Bändchen sind nur von hervorragenden Kennern des betreffenden Faches verfaßt, die unbedingte Beherrschung des Gegenstandes mit der Fähigkeit klarer und interessanter Darstellung vereinigen. Gerade diese Kombination soll der neuen Sammlung ihren besonderen Stempel aufprägen.

Verlagsbuchhandlung  Julius Springer in Berlin

Bestellen Sie bei Ihrem Buchhändler

pleasant correspondence that looms before me.” Springer used all his own contacts. Richard Courant named 18 topics and also potential authors. However, he qualified his advice: “As soon as one comes to the areas of the natural sciences or mathematics, it becomes enormously difficult to write for really every layman.” It became clear very soon that the “typical” Springer author was hardly likely to be won as a contributor.

The size of the books was another problem. Each book should not exceed ten sheets (160 pages), because at a price of 4.80 mark and a print-run of 5000 copies this would mean that the production costs would just be met. Any profit for the publisher would have to wait for later editions. In fact, this happened only rarely. Of the 48 books published until 1943 only four had second editions, and only the first two books of the series, as well as Heinrich Fischer’s *Wetter und Wetterentwicklung* (Weather and Weather Development, 1932), had third editions.

The series was thus hardly profitable but, while Springer often accepted losses over books by his authors and in fact often reckoned with that outcome when he signed the contract, he certainly took them with equanimity for “his” series. Any financial loss will have concerned him less than the fact that his favourite series was not accepted with more alacrity by the public.

After Richard Goldschmidt had been forced to emigrate Karl von Frisch took over editorship of the series. He remained faithful to the enterprise when it was restarted in 1952. By 1991 the 118th volume had been published.

It was impossible for Julius Springer to have a publishing programme for engineering books that could be compared with Ferdinand Springer’s for the natural sciences and medicine (see p. 164 f.). The main reason for this lies not only in the quite different conditions within engineering but also with its authors.

It is usually difficult to persuade engineers to write scientific articles or books. With regard to primary work, technical inventions are written about only when a patent has been granted. Furthermore, in industry the publication of new technical developments and, even more, inventions often conflict with economic interests. But for the scientist, whose discoveries are hardly ever recorded in a legal sense, a report of previously overlooked or undiscovered phenomena in a periodical ensures

*Special Features
in the Publication
of Engineering Books*

priority. This explains why journals with a high proportion of research reports wish to guarantee the shortest possible time between submission of manuscript and publication.

The fear of industrial enterprises that their engineers could report about their own or operational experience or, even worse, reveal secrets has persuaded many companies to prohibit their employees from writing monographs or editing journals, an attitude that is rather an exception in the natural sciences.

Another impediment among engineers to writing for publication, related to their training, was still noticeable at the time, namely that they usually possessed less ease and elegance in writing than those working in the natural sciences. This was true also of their correspondence with publishers, which was much more persistent and extensive than, e. g. that of natural scientists. When there were approaches by publishers it was common for engineers to have notions about royalties far above anything that could be justified by the customary publishing calculations. It was not unusual for royalty expectations to be based on payments received for writing expert opinions. Demand for high royalties was often unreasonably combined with the wish that their book should have a low selling price.

Relations with academics at engineering colleges were usually much easier. To be an author or editor with a respected publishing house was for them an important factor in their reputation as scientist and in their academic career.

*The Engineering Branch
of Springer-Verlag
After World War I*

The circumstances in which Julius Springer again took up his work after World War I were incomparably more difficult than those for his cousin Ferdinand. When he returned from his war service in December 1918 he needed a longer period of settling into his publishing activities than his cousin who had been able to resume his work in September 1915 and therefore had had the opportunity to concern himself intensively with plans for the post-war period.

Furthermore, his authors and editors were suffering from the consequences of the lost war much more than those Ferdinand was or would be dealing with. One need only think of the losses in the basic industries through the loss of territories and limited sovereignty of the Reich, now the Weimar Republic – occupation of the Rhineland and, in 1923, also of the Ruhr area. The

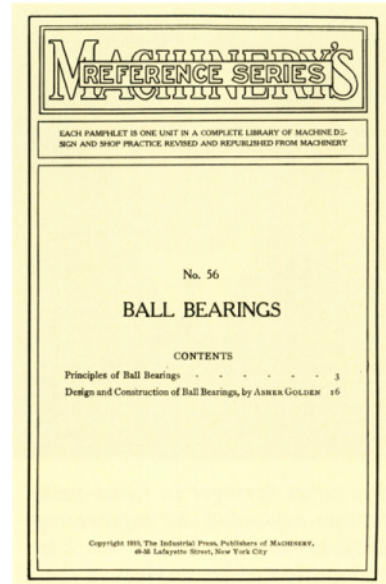
reparations in coal, steel, machinery and means of transport, the loss of almost all export markets and the almost impossible imports of raw and auxiliary materials hit especially hard a branch of the publishing house that was dependent on industry as a partner in its plans. In this situation Julius Springer saw his special task in bringing out student and other textbooks, while research publications had to be postponed for the time being.

One of the first post-war undertakings were the *Werkstatthilfsbücher* (Manuals for the Workshop).⁵⁸ The idea for this series came to Julius Springer after a discussion with Alexander Luchars (see p.203ff.) who had offered his book *Machinery Handbook* for translation. Springer thought it best to bring out a book series instead, in which individual topics of metal-working could be presented, such as turning, punching, pressing, thread cutting, drilling, milling, grinding, etc. The Industrial Press had been publishing just such a series for some years and had already brought out 60 titles by 1913. Springer's plan was for the various topics to be dealt with by German authors. Translations were not to be considered.

In 1913 Springer had persuaded the Berlin engineer Ernst Weißhuhn to be editor. He had just finished his studies under Georg Schlesinger, and his doctorate dissertation had been published by Springer-Verlag. The booklets were to have about 40–50 pages and were to be written “in a popular and easily understandable style, in the best sense of these words.” A readership corresponding to that of *Werkstattstechnik* (Workshop Technology) (see p.204f.) was envisaged.

Three manuscripts were ready at the outbreak of war, and contracts had been signed for five more. Publisher and editor were of one mind that the series should be started after the war, especially as the editor had been called up on August 2, 1914. After Weißhuhn had been killed in action, in the summer of 1915, the engineer Eugen Simon became editor. He had already been designated as author of several books in the series.

In 1914 the price for each volume had been planned to be 1 Goldmark and this was kept to even after introduction of the “key number” in 1922 (see p.237f.). A comparison with two literary book series of the time will show how narrow was the calculated margin for these books: one book, of many fewer pages and with a cardboard cover, in the Insel-Verlag series cost 50 pfennig; and a Reclam booklet, with a quarter of the pages, 20



292 *The North American Machinery's Reference Series (each volume cost 25 cent) gave Springer the idea for his Werkstatthilfsbücher (Workshop Manuals). The book on ball bearings was published in 1911, just as Springer started to plan his own series.*



293 Julius Springer jr. (1880–1968) further expanded the engineering programme after World War I. In recognition of his services to the engineering sciences the Technische Hochschule in Stuttgart awarded him the honorary degree of Dr. Ing. (Doctor of Engineering) on July 18, 1923.

294 Cover for the Werkstattbücher series, designed by the wife of Eugen Simon, its editor. Although there was not much enthusiasm for it within Springer-Verlag, the design was used unchanged for over 50 years.



pfennig. Both books were largely prose texts with low typesetting costs, they had no illustrations and the print-run was as a rule 10,000 copies. Springer's Manuals were all books specially written, their authors usually not restrained in their corrections, and each volume often contained more than 100 specially prepared technical illustrations. Authors expected at least 10% of list price as royalty. It was a real feat to calculate a feasible return for this series with print-runs of, at first, 5000 copies.⁵⁹

During the preparations for the series publisher and editor came under considerable time pressure, because the Association of German Engineers was about to launch a comparable series at the same price, entitled *Betriebsbücher* (Workshop Books). In view of this competition Springer-Verlag had absolutely no room for adjustment of either price or royalty. It also made it more difficult to find suitable authors, as many were already committed to the other series. Many texts were deficient in their organisation and especially their style. "These difficulties with the form [of language] I have expected," Simon wrote to Julius Springer on July 22, 1919, because one needed factory engineers as authors for most of the topics, but they "lacked the ability to express themselves." On the other hand, authors who had enough experience in the organisation of such books were usually not experienced enough in the practical aspects of the topic.

The first booklets came out in January 1921. The cover design for the series had been drawn by the editor's wife. Springer was not completely happy with it – he would have preferred a typographical design – but he consented. The buyers clearly liked the cover and it remained unchanged. One hundred and twenty five booklets were published before the series was discontinued in 1973. Almost all the titles went into second editions, many had more, and each time they were fully revised. The most successful title in the 1920s was Paul Schimpke's *Die neueren Schweißverfahren* (New Welding Methods), published first in 1922 as No. 13 in the series. It had seven editions.

Correspondence between publisher and editor and authors was extremely time-consuming for such a series. It filled 17 filing boxes up to 1936, when No. 58 was published. Within Springer-Verlag, more used to large books with small print-runs and high prices, such series were jokingly considered "bits and pieces." However, opening up the programme for books that were not for the academic market brought access to groups of buyers not previously reached and who would later buy other, weightier

books. In addition, authors who made their writing debut in this series, such as Paul Schimpke, later successfully published larger books with Springer.

The *Taschenbuch für Bauingenieure* (Manual for Building Engineers) was in its 4th edition in 1921. This was a quite extraordinary success, especially as nearly half of the ten years since its first edition were during wartime. Depending on their point of view, the reviewers had praised it for its succinct and yet extensive presentation of the material. For pupils at the technical schools for building, however, it probably contained too much. On the other hand, students at the technical colleges, where chairs in the various disciplines had recently been created, needed more detail, especially as there was beginning to be more specialisation among building engineers.

When the need for a new, enlarged and revised edition was becoming evident, a year after publication of the first edition, Julius Springer saw the opportunities opening up in this market. In November 1911 he approached Robert Otzen, professor for building engineering at the Technical High School (College) in Hanover for his opinion on the chances for success of a collection of reasonably concise textbooks in the different specialties within building engineering. While some such books were already on the market, none was of much practical use. He also inquired of Otzen whether he was willing to be the senior editor of such an undertaking.

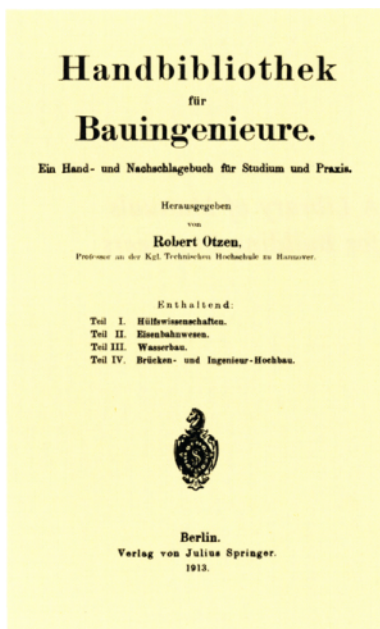
Otzen agreed: “Good textbooks will always be needed and will find their market, whether or not there are a number of similar works... The greatest fault of existing books is the lack of uniformity between them” (November 17, 1911); this could be avoided with good planning. Otzen had a clear and comprehensive concept of his role as editor. He wanted to be involved in decisions about the kind, size and number of illustrations. Springer was pleased to have found so energetic an editor on his first attempt, but he warned him against too rigid a limit on the authors’ right to make their own decisions. He advised flexibility in his approach.

Almost every author voiced reservations about the contract proposals. For most the named deadline was too soon. Apparently all of them were overwhelmed with work. Yet they also wanted more pages and more illustrations. No one seemed to be satisfied with the royalties: 120 mark for 16 pages with a print-

*A Library of Manuals
for Building Engineers*

295 Robert Otzen (1872–1934), editor of the *Handbibliothek für Bauingenieure* had been a professor at the Technische Hochschule in Hanover from 1908 onwards and its Rector in 1913/15. In 1926 he became the chairman of the HaFra-Ba (Association for Preparing the “Autoroad” Hanseatic Towns-Frankfurt-Basle).





296 Cover of the large prospectus for the Handbibliothek für Bauingenieure (Reference Library for Construction Engineers: A Manual and Reference Book for Students and Practitioners). It was ready to be published in 1913, but had to be put on one side as most authors had not yet sent their manuscripts. The first volume finally appeared in 1921.

run of 2000 was not enough. At first there was general acceptance of the proposal that revenue from foreign language editions be equally divided between author, editor and publisher. But when an Italian publisher was interested in acquiring translation rights and Springer informed authors that they should not expect more than 20 mark per 16 pages, several refused to accept these terms and thus blocked the sale of translation rights.

All manuscripts should have been completed by October 1913, but only four authors were on time. The others came in slowly, from time to time. Even so, some of the manuscripts went to the typesetter, authors' sketches went to the illustrator and were then sent for block making. One quite extensive project was, in fact, ready for printing. Unfortunately, correspondence with some of the slower authors was lagging behind, because Otzen had been elected Rector of the *Technische Hochschule* in Hannover from the summer term of 1913. There were further delays, because on July 23, 1914 the authors were asked to add a list of references or supply them in retrospect if the text had already been sent. Production was now in full swing. And then war broke out.

An attempt was made to finish at least those books of which production had started. But this had to be abandoned in October 1914. Both editor and publisher had been called up and Fritz Springer, who had taken over the firm's management, with the editor's consent released all authors from the agreed deadlines. Springer-Verlag did not want to start with a fragmented series, especially at a time when one could not expect any sales of scientific books. Only one author protested: he expected the book to be printed or he would take legal steps against the publisher for breach of contract.

In December 1918, immediately after the return of Julius Springer and Robert Otzen, work on the series was resumed. But the hope of bringing out the first few volumes in the autumn of 1919 proved to be too optimistic. Eight of the 27 authors had either been killed or had died during the war or had requested to be released from their contracts. The German economy was slow to start, travel and communications were interrupted by strikes and disturbances, and the supply of materials presented many difficulties. A number of authors started to question the terms of the contract again. Not everyone accepted an increase in royalties in line with inflation. Some pointed out that their text had been quite or nearly ready for printing or they had

already received galley proofs at the outbreak of war. Now they would have to put much work into it, the equivalent of bringing out a new edition, and for this the contract had stipulated additional royalties. In some instances six years had elapsed since the manuscript had been completed.

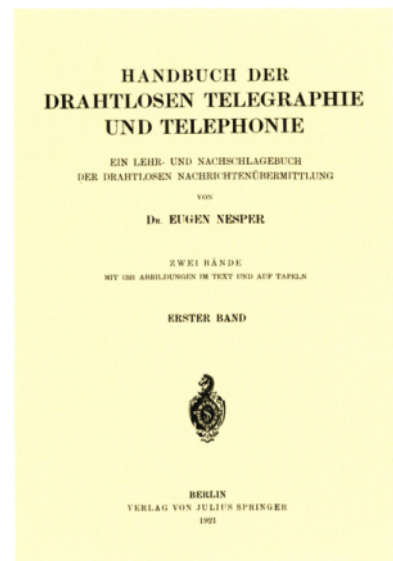
Despite such adversities, caused by the circumstances of the times, five volumes of the *Handbibliothek* were published in 1921 and 15 more by 1927. New revised editions became due in 1930. It had been a hard restarting, but all the effort bore fruit in that Springer-Verlag made a name for itself as a publisher of books on building construction.

In the summer of 1915 the engineer Eugen Nesper⁶⁰ submitted a book on wireless communication to Springer-Verlag, but was regretfully told by Fritz Springer that the firm could not accept it because of the continuing depressed state of scientific book sales. He would be ready to reconsider once peace had come. On November 8, 1918, the day before Philipp Scheidemann proclaimed the German Republic and times were anything but peaceful, Nesper came back to Springer-Verlag and reported that his book had now grown a good deal larger and contained over a thousand illustrations. Because of the uncertainties of the times the firm decided that it could not publish such a very large book, even though it was on wireless communication, a subject in which great progress had been made during the war. Nevertheless, Springer wanted to have a look at the manuscript. This was by no means easy, because Nesper lived in Vienna, where he worked for C. Lorenz AG, and under no circumstances was he going to entrust the manuscript – packed in a box weighing 35 kg and evidently containing many previously prepared printing blocks – to the railway during a time of unreliable communications. In the end the German Embassy in Vienna transported it to Germany by diplomatic courier. Nesper clearly had good contacts.

First estimates indicated a book of at least 1800 pages. It was calculated that at a print run of 1000 copies the list price would have to be about 150 mark. Julius Springer hesitated to commit himself, and Nesper's offer of contributing towards the production costs with war loan bonds for the nominal value of 15,000 mark failed to alter the calculation significantly. Springer suggested rigorous trimming of the text. But this amounted to only 160 pages. In the end Springer called in a consultant, Hans

*Communication
and Radio Technology:
Eugen Nesper*

297 Julius Springer was initially sceptical about a plan for a Handbuch der Drahtlosen Telegraphie und Telephonie (Handbook of Wireless Telegraphy and Telephony), a text- and reference book. But the advice he received from Hans Bredow persuaded him to publish the two-volume work. In the event it was very successful, 2000 copies being sold in 18 months.



298 *Eugen Nesper (1879–1961) worked from 1904 to 1906 at Telefunken GmbH, then with C. Lorenz AG in Vienna, whose chairman he became in 1917.*

299 *Hans Bredow (1879–1959) was Ministerialdirektor (senior civil servant) in the Reich Postal Ministry. In this capacity he was responsible for building up a radio network in Germany. He became Secretary of State in 1921 and has been called the “Father of German Radio”. He was banned from working during the Nazi period.*



Bredow, who had been the founding director of Telefunken in 1903 and knew Nesper from that time. His supporting vote was decisive, and on January 20, 1920 Springer signed a contract with Nesper.

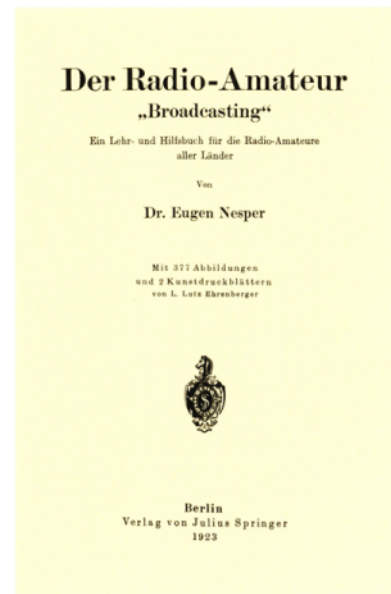
The production process was full of problems. Mail between Vienna, Berlin and Würzburg (printing was to be done by Stürtz) sometimes took weeks, and many items were lost. At long last, in June 1921, the work was done. It was the most extensive treatise of its kind, and the publisher, rightly estimating the sales chances, had not only decided on a print-run of 2000 copies, but had also used book cloth and art paper of the highest quality. Export sales, one of the reasons for this level of make-up, were up to their expectations and the sales of the book within Germany were unusually high. Altogether, the book was a great success, sold out within 18 months and a new, revised edition was put in preparation.

Meanwhile Nesper was writing on “amateur wireless operations.” Amateurs were becoming active in radio, known as “broadcasting” in the USA, in the autumn of 1921 and activity had spread like an avalanche. In Germany, where the Post was guarding its monopoly, it was expected that radio transmission would be permitted in the course of 1923. Here, too, there were already thousands of radio enthusiasts and transmitters. The book would thus appeal to a wide public, as it would differ from numerous newspaper articles on the subject in its scientific reliability: Nesper guaranteed this through his competence, knowledge and use of numerous foreign publications, as well as his easy scientific prose.

On February 5, 1923 he told Springer-Verlag that his book was ready. "Taking into account the enormous growth of amateur radio activity in almost all countries... I should like to suggest to you that in this case you consider a larger print-run from the start." Nesper also proposed that "contrary to your usual habits you place advertisements by radio companies [for equipment and accessories] at the end of the book." He could supply names and addresses. By including advertisements the price of the book could be kept low. There was no precedent at Springer for this, but then Nesper's book was an outsider. And so Springer gave in to an author full of ideas, many of which had never been tried. (Springer had once turned down his suggestion to relocate the Hirschwald Bookshop to the other side of Unter den Linden, because that was the better side for pedestrians...).

Der Radio-Amateur was sent out on August 10, 1923: by the end of the month nearly 1600 copies had been sold, i. e. more than half the print-run. A second print run came out in December and sold out in January. A third one of 5000 copies became available only three weeks later. This record schedule was possible only because, after the end of the inflation, printers suffered from a dearth of orders and so the book was printed on several presses. A fourth print run of 10,000 copies was sold out by May 1924. Such figures had never before been experienced by Springer, who was also very surprised that 40%–50% of the production costs had been covered by advertising revenues.

The book had come out at just the right time. On October 29, 1923, i. e. shortly before the end of the inflation, the Berlin radio station had just begun broadcasting from its premises in Vox-Haus in Potsdamer Strasse. A few months after publication of *Radio-Amateur* Springer-Verlag brought out the first issue of a journal by the same title, also edited by Nesper. It had 300 subscribers in October 1923 and 10,000 by January 1924! But competitors were not asleep. Ullstein, Scherl, Franckh'sche Verlagshandlung and Deutsche Verlags-Anstalt all quickly brought out books about radio, each outdoing the other in make-up and/or price. Nesper bombarded Springer-Verlag with demands for more promotion: journals for radio enthusiasts from other publishers could be bought anywhere, but not his. It was quite true that Springer-Verlag was not prepared, partly because of staffing, for such a publicity and distribution campaign. Added to this was the fact that Otto Lange, the imaginative director of the marketing department, had been in Vienna to build up the publishing house there since January 1, 1924.



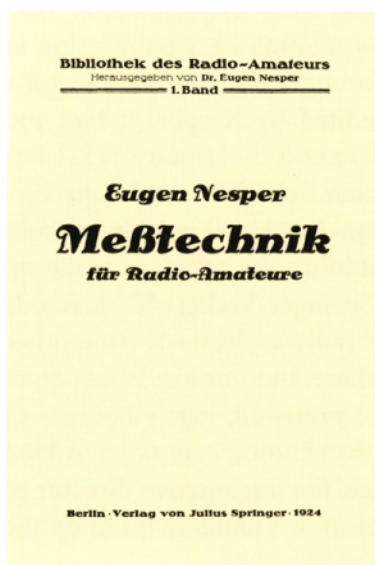
300 *Der Radio-Amateur* (*The Radio Amateur: "Broadcasting"*) was "a teaching and helping manual for radio amateurs of all countries". It was more successful by far than any previous Springer publication with 20,000 copies sold within eight months.

By May 1924 the sales of *Radio-Amateur* had slowed down. It was of little avail that the price had been lowered from 8 to 6 mark for the 5th print-run. By now the book was hardly profitable, because the author was getting a royalty of 12 ½ %, the discount was 40 % and the marketing budget was much higher than for any other Springer book.

By October 1924 Nesper should have finished the revisions which had become necessary for a second edition. However, he could not any longer assess and incorporate the numerous new developments. Furthermore, his energies were being largely absorbed by the journal *Der Radio-Amateur*, which was coming out weekly. The second edition was not ready for Christmas 1924, although the 5th print run had been sold out, and it finally became available in August 1924. Despite a print run of 6000 the old price of 8 mark could not be held. Because of the many corrections and additions it was almost like a new book – its size had almost doubled – the printing costs had risen considerable and advertising revenue had fallen. The new price of 18 mark and the absence of the book for nearly eight months had a disastrous effect. In the meantime the market was more than filled. Even subscriptions to the journal *Der Radio-Amateur* had fallen to 3000. By 1925 there were 25 other similar journals, not counting those that printed broadcast programmes.

However, a new series, *Bibliothek des Radio-Amateurs* (Library of the Radio Amateur), founded by Nesper, soon comprised 32 booklets. At first sales were quite good, and some titles

301 Nesper's *Bibliothek des Radio-Amateurs* (Library of the Radio Amateur) was published in 32 booklets between 1924 and 1928, some in several editions. Shown here is the title page of *Meßtechnik* (Measuring Techniques).
302 Cover page of the journal *Der Radio-Amateur* (The Radio Amateur), published jointly with M. Krayn Verlag. Unfortunately it did not succeed against the opposition of numerous existing similar journals and closed down in 1926.



actually had to be reprinted twice. As they had to be sold through radio shops, where the radio amateur was most likely to be reached, the enterprise was not profitable for the publisher. In consequence it was decided to sell the series to the Weidmannsche Buchhandlung.

All in all, Springer's excursion into the amateur radio area had only briefly been worth-while. The wave of interest by radio hobbyists had greatly receded by 1925, when mass-produced sets had become ever cheaper and better. Springer-Verlag decided to leave what remained in this area to other publishers, but intensified its energies in the areas of wireless and remote signal technology. The first large, entirely scientifically oriented work, published in 1927, was the *Taschenbuch für drahtlose Telegraphie und Telephonie* (Manual for Wireless Telegraphy and Telephony) of 1250 pages, edited by Fritz Banneitz. After Freytag, Dubbel and Foerster it was the fourth of its kind.

Jurisprudence and economics had held a firm position in Springer-Verlag's programme since the foundation of the firm. Among the earliest such books was Julius von Kirchmann's talk *Von der Werthlosigkeit der Jurisprudenz als Wissenschaft* (The Worthlessness of Jurisprudence as a Science). It was reprinted four times in the year it was published (1848) and, because of its topicality to the present day, has been reprinted many times.

*Jurisprudence,
Political Science
and Economics*

The political scientist Rudolf von Gneist had published his books with Springer-Verlag since 1857. Other works in this area were *Handbuch der Gesetzgebung in Preußen und dem deutschen Reich* (Handbook of Laws in Prussia and the German Reich), edited by Robert Graf [Count] Hue de Grais, which had grown to 11 volumes between 1901 and 1906; *Handbuch des geltenden Öffentlichen und Bürgerlichen Rechts* (Handbook of Valid Public and Civic Laws) edited by Robert Zelle, Chief Mayor of Berlin, which went through six editions between 1888 and 1911. The first two Springer generations had thus shown their interest in this area of publishing. Although Ferdinand Springer jr. had attended lectures on jurisprudence, in his first few years as a publisher he was content to rely on those old titles which continued to be successful. He did not carry on with Hue de Grais' *Handbuch*, because it had not sold well.

Only fairly short books appeared up to 1914, most of them on commercial law. Ernst Springer, Julius's youngest son, pub-



303 Ernst Springer (1860–1944), youngest son of the founder. He advised his nephews in difficult legal matters (see Note No. 25).

304 Title page of the *Enzyklopädie der Rechts- und Staatswissenschaften* (Encyclopaedia of Jurisprudence), a one-volume publication when Springer-Verlag took it over from Oscar Häring in 1912. It was transformed into a multi-volume work on legal and political sciences.

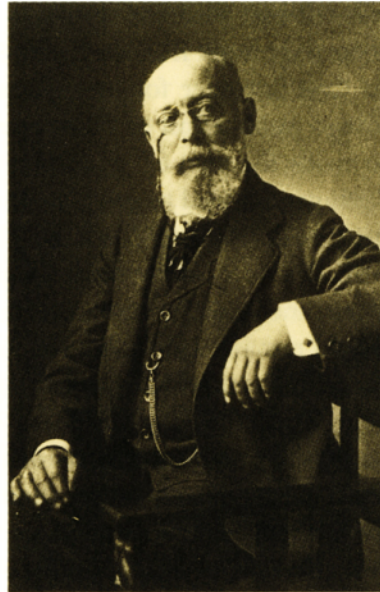


lished two booklets on the reform of laws relating to civil proceedings. He was a distinguished lawyer who sometimes advised his nephews on difficult transactions.

However, the publishing programme turned more in this direction when the firm acquired Behrend & Co. in 1912. First came the founding of the *Annalen für soziale Politik und Gesetzgebung* (Annals of Social Policies and Legislation) in 1911, and of the *Monatsschrift für Arbeiter- und Angestellten-Versicherung* (Monthly [Journal] for Worker- and Salaried Employee Insurance), from the spring of 1913. However, it only became clear after Springer-Verlag acquired the Berlin publishing house of Oscar Häring on January 1, 1914 that the firm intended to develop this area fully. Its most successful book was *Das Völkerrecht* (International Law) by Franz von Liszt, a nephew of the famous composer and pianist. There had been nine editions between 1898 and 1913, and it was one of the few Springer books that sold well even during the First World War. New updated editions became necessary in April 1915 and August 1919.

The Häring list also contained other titles which were well thought of among lawyers at that time. Some had been brought up-to-date a few times and could be developed further. But the seed for expansion of Springer's list in jurisprudence lay in a work that had come out in a completely revised and enlarged edition in 1912, but which the now rather elderly editor had, by his own admission, not thought worth continuing. This was the *Enzyklopädie der Rechtswissenschaft* (Encyclopaedia of Jurisprudence) of more than 1500 pages, edited by Karl von Birkmeyer (1847–1920). Immediately after having taken over Häring, Springer-Verlag began to plan a new edition.

As Birkmeyer did not want to take part in any further edition (a decision which probably did not displease Springer), the firm signed a contract with Franz von List and Walter Kaskel for them jointly to take over the editorship. Liszt was particularly important to further editions, because he had been a contributor and as a respected lawyer would serve as a figure-head for the revived encyclopaedia. Walter Kaskel (1882–1928) had been a friend of Ferdinand Springer since their youth. When he made his first publishing contact with the firm (in 1911) he had only just become a fully qualified lawyer. But he had already proved himself an excellent editor of the *Monatsschrift für Arbeiter- und Angestellten-Versicherung* (see above). The plan for the Encyclopaedia was at first quite modest, a two-volume work of about 1600 pages. The letters of invitation to

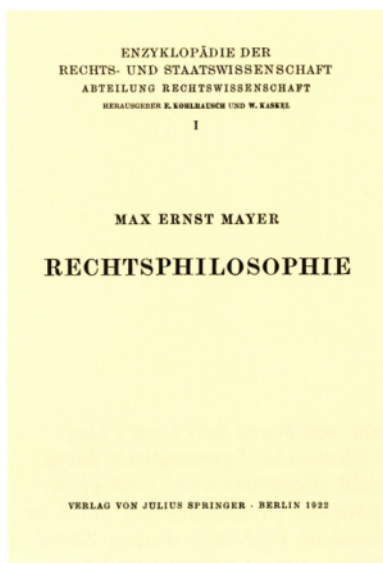


305, 306 Franz von Liszt's *Das Völkerrecht: Systematisch dargestellt* (Constitutional Law: systematically presented) was much in demand, especially during World War I, and 12 editions had been published by 1925.

the chosen contributors were sent out on July 21, 1914 and most had sent back their contract a week later. As Kaskel had been excused from military service for medical reasons he was able to continue his work during the war. With Ferdinand in the army Fritz Springer kept in contact with the editor. In November 1914 Kaskel had concluded that a third volume, on political economy and statistics, would be necessary. This move suggested a widening of the title by adding *und Staatswissenschaft* (and Political Science). Eugen Philippovich, a political economist in Vienna, had already agreed to contribute and seemed willing to become a co-editor. However, both publisher and editor were convinced that manuscripts should not be handed over until just before the end of hostilities. After several postponements the final date was set for October 1, 1916, but when war continued relentlessly no further dates were fixed.

Franz von Liszt died on June 21, 1919, and was succeeded a year later by his former assistant, Eduard Kohlrausch (1874–1948), who had been professor for penal and trial law in Berlin since 1919. Arthur Spiethoff⁶¹ took over the section on political science in July 1921, after Philippovich had retired.

The first publication in the series, brought out in 1922, was a booklet of just 100 pages by Max E. Mayer on *Rechtsphilosophie* (Legal Philosophy). There were 13 further booklets in 1923, some of even fewer pages. What had become of the planned three-volume concept? As early as the spring of 1914 several authors had urged that their contribution should come out separately. It



307 The first volume of the new *Enzyklopädie der Rechts- und Staatswissenschaft*, Abteilung Rechtswissenschaft (Encyclopaedia of Legal and Political Sciences), *Max Ernst Mayer's Rechtsphilosophie* (Legal Philosophy), appeared in 1922 (see Fig. 304).

was felt that students should not be asked to buy an expensive 1600-page book if all they wanted was one part, of 60–90 pages. At first Springer fought against this idea, and he decided to forego publication of Philippovich's contribution in order not to erode the plan of an encyclopaedia. After the war, however, Springer decided to drop the three-volume edition in favour of numerous small publications. This had a number of advantages. After the war, many areas of government legislation were revised, and authors were uncertain how long their contributions would remain valid. This was true, for example, of labour and social law, in which Kaskel had specialised. Also, Springer's experience with the tardiness of contributors to the medical handbooks may have persuaded him to accept a large number of short publications, rather than to continue insisting on bundling them together into large volumes, which on publication ran the risk of being outdated in important parts. This, of course, did not exclude publishing sizeable writings by one author. Thus he published Julius von Gierke's *Sachenrecht* (Property Law), Hans Kelsen's *Staatslehre* (Political Science), and Walter Kaskel's *Arbeitsrecht* (Labour Law) in 1925, Walter Jellinek's *Verwaltungsrecht* (Administrative Law) in 1928, James Goldschmidt's *Zivilprozessrecht* (Law of Civil Suits) in 1929, and Alfred von Verdross's *Völkerrecht* (International Law), the final one, in 1937. These books had between 360 and nearly 500 pages. One of them, *Römisches Privatrecht* (Roman Civil Law) by Paul Jörs, first published in 1927, continues to have a secure place in the publishing programme to this day.

Walter Kaskel, who had been Springer's official adviser on legal publications since 1924, had been ailing for some years and in 1925 had declared his friend Hans Peter to be heir to his literary estate. As a result, on Kaskel's death in the autumn of 1928 Peters took his place as co-editor of the *Enzyklopädie* and soon after became adviser to the legal programme, a position which he held until his death in 1966. The *Enzyklopädie* greatly contributed to the flourishing of the legal and political science areas of the firm's publishing activities. With over 250 books between 1920 and 1932 it had become the third strongest of the firm's divisions, after medicine and engineering. Several series and journals contributed to this development: The *Archiv für Urheber-, Film- und Theaterrecht* (Archive for Copyright, Film and Theatre Law), started in 1928, continued until 1944; the *Zeitschrift für soziales Recht* (Journal for Social Legislation); and the *Zeitschrift für Nationalökonomie*, founded in 1929, (recently

renamed Journal of Economics). The journal *Steuer und Wirtschaft* (Tax and Economy), giving evidence of Springer's commitment to this publishing area, was acquired in 1934. Springer-Verlag in Vienna had founded *Juristische Blätter* (Legal Papers) in 1928, but after the annexation of Austria to the "Third Reich" it had to cease publication.

After 1933, with the coming to power of the national-socialists, Springer-Verlag had drastically to reduce its activities in this field. Ideas which this publishing house was not willing to transmit now began to dominate in the legal and political sciences. The number of publications in these areas now fell to a fraction of what it had been during the Weimar Republic (see List 14 on p. 358).

When Springer-Verlag began to produce a large volume of scientific books in the last third of the last century, their design and typography at first followed the custom of the day. The only unusual feature was the tendency to have more and more of the scientific books cloth-bound, with paper-bound editions sometimes appearing in parallel. The usual material for the cover was black calico (with black endpaper), so that wear and tear would not be immediately noticeable. Depending on its size, the additional sales price for hard-bound books ranged from 1 mark to 1.50 mark. But no bookbinder would have done it for this price, because the charge for just the cover was 1.20 mark.

*The Design
of Springer Books*

Only the name of the author(s) and title were on the cover, in gold letters. There were no decorations except for a double line at the edge, blind embossed. At the turn of the century some covers showed the unmistakable influence of *art nouveau*. It is to be assumed that art-conscious authors had asked for this type of cover, which differed from the usual Springer style.

Similarly, the typography followed patterns that had become customary for scientific books. The printer would suggest some particular type-face and the publisher would generally accept it. The rapid increase in book production since 1910 will have made a certain amount of standardisation essential. It was more economical, for example, not to let the format be decided by chance. Certain formats became standard, and with them a harmonising text lay-out that had proved itself. This tendency towards standardisation and uniformity was driven forward with great persistence during the First World War by Franz

308 Ludwig Sütterlin (1865–1917) became famous for his design of German and Latin scripts, which became compulsory in the writing lessons of all schools in Prussia in 1915 and from 1935 to 1941 in the rest of Germany. The illustration by him shown here was a head piece for the book *Berlin und seine Eisenbahnen* (Berlin and Its Railways), published by Springer in 1896.



Fischer, head of the production department between 1914 and 1926. It was born partly out of necessity, because there were hardly any expert staff left, and work had to be done with people who had to be trained first. In agreement with the most important printing companies (Brandstetter, Spamer and Stürtz), and taking account of their presses, four format groups were chosen and named after standard works published by Springer-Verlag: small Handbuch (e.g. *Dubbel*), large Handbuch, *Ergebnisse*, and *Stodola*. There were standardised lay-outs for each of these. Very large books were set in smaller type, with narrower spacing and wider columns, thus keeping the number of pages (and price) within bounds. For shorter books the type could be larger and the spacing wider.

Each of the typographical standards had its abbreviation so that the printer would know at once what format, lay-out and typography to use. As Springer-Verlag published almost only scientific works, which required a large supply of different type-faces with many additional special signs, the introduction of monotype composing and casting machines after 1904 was a great advance (cf. p. 210 f.). The firm's most important suppliers had bought this machinery by 1910 and (using the Monotype "Old Style") they were ready to provide a type-face of the publisher's choice in all required sizes. It was helpful to the printers that Springer had decided on a house style, because they were able to do corrections for different books on the same machine without change-over.

Most authors had no objection to a uniform style (insofar as they even noticed it). They were interested in rapid and accurate typesetting. Only rarely were there special typographical wishes. One of these was Jaspers's request for a new kind of lay-out. But he soon recognised "how difficult it apparently is to find what is unassuming, solid and persuasive. . . . If the page is too large, the reader may tend to skim it. . . . The relationship, unpenetrable to me, between type, lay-out, paper quality and format probably provides the crucial effect." (September 4, 1931). He was only

now, to his great astonishment, becoming aware of matters which were self-evident to the expert. Jaspers also had his own ideas about the cover design, but after some specimens had been prepared, he confessed freely “that it was excellent you had not followed my choice of type-face. The one you have chosen appears to me very distinguished in its lightness and concise clarity without any grossness” (November 11, 1931). But such involvement in type and lay-out was rare. Springer-Verlag’s authors were and are less interested in brilliance of design than in its appropriateness. Neither reader nor student cares about eccentric ideas of the person in production. What he wants is trouble-free conversion of the text into a book.

When it comes to illustrations, the main demand is for the closest likeness to the original which is technically feasible. As

Sehr geehrter Herr Gosse!

auf Ihren Wunsch, Ihnen Vorschläge für eine Druckweise meines neuen Werkes zu machen, bin ich in verschiedene Buchhandlungen gegangen; um mir Neuerscheinungen anzusehen. Ich sehe, wie schwierig es offenbar ist, das Schlichte, Solide und Überzeugende zu finden. Darf ich mir vielleicht erlauben, Ihnen zunächst die allgemeinen Bemerkungen mitzuteilen, die mir aufgetaucht sind:

Bei einem philosophischen Buche darf nicht zuviel auf einer Seite stehen. Ist die Sache ^(genügend) gründlich gearbeitet, so hat jeder Satz Gewicht und sitzt notwendig an seiner Stelle; daher muss das Lesen ruhig, vergewissernd, eindringend geschehen. Ist die Seite zu gross, so entsteht ein falscher Impuls zum überfliegenden Lesen. Mir scheint es nicht zufällig, dass die Werke früherer Philosophen relativ kleine Seiten hatten. Ideal scheinen mir noch heute die Gesamtausgaben Hegels und Schellings aus den 30er und 50er Jahren des vorigen Jahrhunderts.

In dem für sich undurchdringlichen Verhältnis von Type, Druckspiegel, Papierqualität und Bodenformat liegt offenbar die entscheidende Wirkung. Ich meine, wenn ich die missratenen Bücher ansehe, die schwarze Säule des Druckspiegels müsse ausgesprochen rechteckig bleiben, nicht ins Quadratische zerfliessen, umgekehrt aber auch nicht in falscher Übertreibung zu schmal wirken, ferner

309 Letter from Karl Jaspers, dated September 4, 1931, to Paul Gosse, the head of Springer-Verlag’s production department, about the design of his three-volume *Philosophie* (see text).

Richard Willstätter wrote so tellingly after receiving some engraver's proofs: "It is easy to get such drawings looking beautiful, but difficult to get them faultless" (July 9, 1913).

To produce didactic drawing, e.g. for anatomical atlases, Springer-Verlag had then and still has "academic illustrators" on its payroll, often for many decades. Their painstaking work on the spot – such as in the dissection room under an author's supervision – is the reason for Springer's high reputation in this area. The same is true of technical drawings of which the publisher often obtains merely an author's rough sketch. As several thousand may be done annually, but at irregular intervals, it is better to use free-lance illustrators. The instructions by the publisher's own illustration department about scale and line thickness – symbols are standardised – have to be so precise that the final version in the book, although the work of many hands, looks absolutely uniform.

Similarly, Springer-Verlag's cover was designed during the 1920s and remained essentially unchanged for many decades. The dust-jackets, which were becoming usual even for scientific books, were made of firm, corn-coloured paper, and all words were printed uniformly in a type prescribed by the publisher. Author, title, logo and publisher's line – this was enough. But it was a fixed rule that the publisher's name had to be in smaller type than the author's, however long. It was not least thanks to Springer-Verlag's careful production of its books and journals that it so quickly acquired such a high reputation with both

310, 311 In the case of books meant for a wider public Springer-Verlag deviated from its usual standard design. On the left, a cloth-bound cover from 1901; on the right, the paper cover of a book by the engineer Paul Riebensahm about his travels in the USA in 1924.



authors and the market. The words of gratitude from Max Foerster, editor of the *Taschenbuch für Bauingenieure* is typical of many others received:

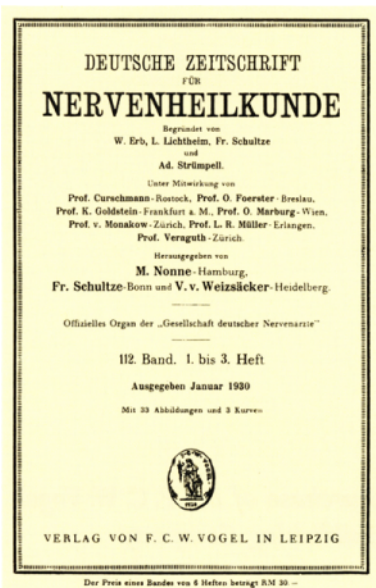
As this publication, created by years of work, is handed over to the benign reception of the professional circles, I cannot help but convey at last my special thanks and those of my collaborators to the Julius Springer-Verlag and express our unqualified recognition of the circumspection and obliging ways with which they have furthered and supported the *Taschenbuch* from its first beginnings. This has only been possible through the selflessness of the Julius Springer firm to bring out the publication in its outstanding make-up and with the number of excellent illustrations, which make it especially valuable.

In the middle of June 1930 the Leipzig publishing house F. C. W. Vogel produced a *Festschrift* to mark the 200th anniversary of its founding [HOHLFELD]. Its first success had come after it had been acquired by Siegfried Leberecht Crusius in 1764. Among its authors were Karl von Linné and Samuel Hahnemann (whose books were still available 100 years after publication of their first editions). In 1788 it had published Schiller's *Geschichte des Abfalls der Niederlande* (History of the Revolt of the Netherlands), as well as the *Geschichte der merkwürdigsten Rebellionen und Verschwörungen...* (History of the Most Peculiar Rebellions and Conspiracies...), edited by Schiller. In 1810 the firm was bought by Friedrich Christian Wilhelm Vogel who gave it its new name. Among books he published was, for example, the *Hebräisches und aramäisches Handwörterbuch über das Alte Testament* (Hebrew and Aramaic Dictionary on the Old Testament) by Wilhelm Gesenius, which carries his name to this day.⁶² The firm turned to medicine only after Vogel's nephew, Dr. Carl Victor Lampe-Vischer jr., had taken over the firm in 1862. He was successful in attracting several prominent doctors, e.g. Erb, His sr., Naunyn, Schmiedeberg and Ziemssen. Soon multi-volume handbooks, textbooks and archival journals formed the backbone of the firm. Carl Friedrich Lampe-Vischer (1864–1937), his son, joined the firm in 1890 and took it over after his father's death in 1907, the very same year in which Ferdinand Springer began to build up an extensive medical programme after the death of his father. When the *Festschrift* came out, the sale of the firm to Springer, on January 1, 1931, had just been agreed, but there was no official announcement. Only insiders will have noticed that the anniversary articles in the *Börsenblatt* on October 14, 1930 presented the Lampe-Vischer

Purchase of the F. C. W. Vogel Publishing Company

³¹² Portrait of Wilhelm Gesenius (1786–1842), scholar of semitic languages and the Bible, professor of theology in Halle from 1812. There he worked on his concise dictionary of the Hebrew and Aramaic versions of the Old Testament, published in 1812. It is still being published in new editions and continues to bear Gesenius's name.





313 Front page of the *Deutsche Zeitschrift für Nervenheilkunde* (German Journal for the Study of Nervous Diseases), founded in 1891 by the publisher F. C. W. Vogel, edited by leading German neurologists. Although Springer-Verlag took over the publishing house, its established books and journals continued under the old imprint. The journal was renamed *Zeitschrift für Neurologie* in 1970, before being converted into the English-language *Journal of Neurology* in 1974.

period as though it had come to an end – which indeed it had. Lampe-Vischer, then aged 66 years, had decided to sell the firm because neither of his two sons was interested in continuing it. The transfer to Springer-Verlag was not announced either in the *Börsenblatt* or in a circular to the trade. All that happened was that the book trade was informed about Vogel-Verlag having moved to the Springer House. Until 1940 the publications of the Vogel-Verlag, especially the journals, continued to carry the old imprint. There are several signs which suggest that Springer wished the expansion of his firm to be treated discreetly.

There were, of course, colleagues and also some important authors and editors who followed Springer's renewed expansion with some concern. Ferdinand Sauerbruch, who was editor of Vogel's *Deutsche Zeitschrift für Chirurgie* (German Journal for Surgery), together with Bier, Enderlen and Haberer, had occasionally crossed swords with Springer, and he probably still objected that Springer's own journal, *Der Chirurg* was competing with "his" journal. Another Vogel author, Ludolf Krehl, had always been rather reserved towards Springer and only five years before had engaged in rather a fierce controversy with him. Together with Walther Straub he was the editor of the *Naunyn-Schmiedeberg's Archiv* (of experimental pathology and pharmacology). Neither could quite accept the fact that they were now Springer authors. (Sauerbruch, however, had actually been a Springer author since 1910.) Perhaps keeping the old firm's name was some compensation. In any case, the editorial boards of both journals remained unchanged.

The 1930 anniversary of the founding of Vogel-Verlag was made the occasion of bringing out a complete catalogue of all its titles, nearly 1000. This was a notable stock, even though only half the books were still available. This is not surprising in view of the fact that many of them went far back. For example, the four publications by Samuel Hahnemann came out between 1784 and 1793. Altogether 80 % of the 500 titles had been published before 1914. The stock still being held was, therefore, largely of antiquarian value. Just 68 books had come out since the inflation, a quarter of them new editions. In business terms they were the only ones of value.

The most important part of the inventory was ten journals, most of them of international standing. It was because of them that Springer had decided on the purchase in those difficult times. These journals were:

Verlags-Vertrag

zwischen dem Herrn Professor A. Lücke in Braunschweig und C. Huether
in Greifswald, als Redactoren der „Deutschen Zeitschrift für Chirurgie“
und Dr. Carl Lampe, in Firma F. C. W. Vogel, Verlagsbuchhandlung in
Leipzig.

1.
Der Herr Professor Lücke und Huether übergeben der genannten Verlagsbuchhandlung
die von ihnen im Verein mit einer Anzahl Chirurgen und Anatomen gemeinschaftlich
gegründete Zeitschrift unter dem Titel
Deutsche Zeitschrift für Chirurgie
begleitende Zeitschrift zum Verlage.

2.
Diese Zeitschrift erscheint zunächst jährlich in einem Bande von ca. 10 Bogen in gr.
8., welcher in 6 zwanzigheft abgetheilten Heften ausgegeben werden soll.
Jedem Bande werden bis zu 4 Tafeln (Illustrationen) beigegeben; stellt er sich als
unvermeidlich heraus, dass eine größere Anzahl in einem Bande aufzuführen, so wird
gegen jede weitere Tafel je ein Bogen extra berechnet.

3.
Auf dem Titel jedes Bandes wie auch dem Umschlag jedes Heftes werden die Namen
sämtlicher Mitverleger der Zeitschrift genannt. Diese Mitverleger erhalten je
nach Einsparnis eines jeden Heftes je 1 Einzelexemplar.

4.
Als Redactionsumme stellt die Verlagsbuchhandlung 100 Thaler, in halbjährlichen Raten,
drei Thaler pro Monat, nach Ablauf eines jeden Monats fällig.

5.
Abdrucken erhalten die Herren Redactoren von jedem Bogen je 10 und dessen Rückdruck
je 1 Abdruckbogen zugewandt; je ein je 1 vollständiges Exemplar gratis.

6.
Von Mitarbeitern stellt dagegen die Verlagsbuchhandlung als Honorar für geleistete
Leistungen 12 Thaler, in halbjährlichen 12 Thaler, für den gedruckten Bogen und von jeder
größeren Arbeit 10, von kleineren Mittheilungen, Reparaturen, Verbesserungen etc.
5 Tugendabzüge gratis.
Gewünschte weitere Tugendabzüge werden mit 2 Kgr. pro Druckbogen berechnet.

314 The first page of the contract made in 1872 by Victor Lampe-Vischer, on behalf of the publishing house F. C. W. Vogel, with the surgeons Carl Huether and Albert Lücke for the publication of the *Deutsche Zeitschrift für Chirurgie*. In 1947 it was incorporated, together with the *Archiv für klinische Chirurgie*, into Langenbecks *Archiv für klinische Chirurgie*, which carries the Springer logo.

- *Archiv für Geschichte der Mathematik, der Naturwissenschaften und der Technik* (Archive for the History of Mathematics, the Natural Sciences and Engineering); founded in 1908,
- *Archiv für Kriminologie* (Archive for Criminology); founded in 1898
- *Archiv für Ohren-, Nasen- und Kehlkopfheilkunde* (Archive for Oto-, Rhino- and Laryngology); founded in 1864
- *Deutsche Zeitschrift für Chirurgie* (German Journal for Surgery); founded in 1872

- *Deutsche Zeitschrift für Nervenheilkunde* (German Journal for Neurology); founded in 1891
- *Deutsches Archiv für klinische Medizin* (German Journal for Clinical Medicine); founded in 1864
- *Fühner-Wielands Sammlung von Vergiftungsfällen* (Collection of Poison Cases); founded in 1930
- *Monatsschrift für Kinderheilkunde* (Monthly Journal for Child Health); founded in 1903
- *Monatsschrift für Unfallheilkunde* (Monthly Journal for Accident Medicine); founded in 1894
- *Naunyn-Schmiedeberg's Archiv für experimentelle Pathologie und Pharmakologie* (Archive for Experimental Pathology and Pharmacology); founded in 1873

During those critical years Springer was given tempting opportunities of several take-overs, but the firm was averse to straining its financial powers during the economic crisis. In 1929 Wilhelm Gecks' share of Bergmann-Verlag had just been paid out and the purchase of Vogel had been financed with a bank credit of 200,000 mark, as well as a temporary loan of 300,000 mark from Lampe-Vischer.

At that time many publishers were giving serious thought to concentrating their publishing programme on just a few areas. One Springer author wrote in 1929: "A firm with so many ramifications as Springer must naturally guard against spreading itself too widely. Even in the book trade there is an optimum beyond which the law of diminishing returns takes effect" [FRANZ: 126].

Yet any further concentration, especially in the medical area, would have generated even more annoyance than already existed. Thus Theodor Brugsch, professor of medicine in Halle, who was a member of the university's library commission, reported about complaints "that the library budget had been exhausted by Springer books and journals" [BRUGSCH: 150].

Otto Lubarsch assessed the problem of concentration very realistically when he wrote in 1931:

When a few large publishing houses reach a certain pre-eminent position by buying up smaller firms, one can question the effect on science – there are certainly two sides. But basically they have merely followed the trend of the times and the entire economic movement: even those best informed about the economic situation are hardly able to assess them. It is certain, however, that in the post-war period and especially during the time of the currency collapse only large firms made it possible to hold on to the journal system, especially the part that is strictly scientific [LUBARSCH: 474].

Ferdinand and Julius Springer would arrive at the firm punctually at 9 a.m. and go first to the mail room. Their secretaries would have opened and sorted their post by then. They would merely glance at many items before putting them into the post-trays of the various departments. Some items would have a note by one of the Springers wishing to consult about handling of the matter. They would have gone through copies of letters written the previous day or asked for further information. (Important letters to authors will have been shown to them in the afternoon, already signed, before being sent out.) From 10 a.m. consultations with staff members took place in the conference room situated between the rooms of the co-owners. This routine was kept up by the two heads for many years. It was through this daily contact that they both kept their fingers on the firm's pulse. In addition, they would both look through galley proofs or page proofs that had just been received. Their keen eye for errors was known and feared.

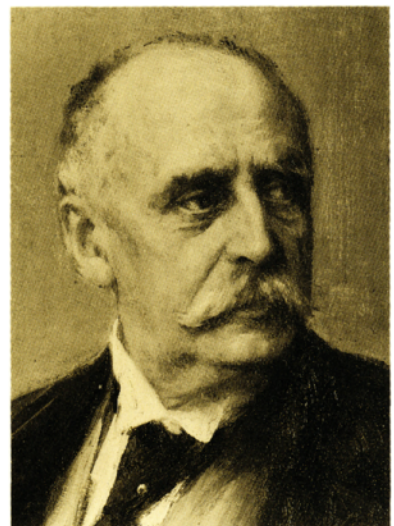
The development of special departments progressed steadily. In 1906 the firm had 65 employees, 20 years later there were more than 300. Such growth inevitably led to further specialisation of functions. The creation of new departments, through which the firm adapted itself to changing market conditions (e. g. promotion), led to an increase in the number of staff which was not always proportional to the growth in production.

The organisation of the firm had at first been looked after by Fritz Springer and then by his son Julius. Seven heads of department had power of attorney. Those who directed smaller working groups and some deputy heads of departments had more limited authority to act. Among these was the head of the personnel department, Anna Lange, and two in bookkeeping. Two attempts of appointing "Adjutants," as Julius termed them, to support the two heads of the firm directly, both failed.⁶³ Ferdinand and Julius Springer managed the publishing house in the same patriarchal manner as their fathers.

When planning any long-term undertaking or when about to buy another firm, the two cousins continued to have the advice of Fritz Springer, their uncle. From the time when he officially left the firm he continued to have general power of attorney, as recorded in the Address Book of the Booksellers. In this capacity he regularly attended meetings of the *Börsenverein* (German Book Trade Association) and the *Deutscher Verlegerverein* (German Publishers Association). But all publishing activities were

The Organisation of the Company

315 Part of a portrait of Fritz Springer (1850–1944) by Hugo Vogel. He was active for Springer-Verlag, with full power of attorney, well into his old age. In 1917 he was honoured by the Technische Hochschule in Dresden with the award of honorary Doctor of Engineering (Dr. Ing. e. h.).





316 By the 1920s even scientific publishers had to put more effort into promoting their books. In 1920 Springer-Verlag set up a “Propaganda department” and published relevant books in this area. The illustration is the title page of a book on “a theory of practical advertising”, *Der Weg zum Käufer* (The Way to the Buyer). Another book published at that time was by Georg von Hanffstengel on *Die Reklame des Maschinenbaues* (Advertising of Engine Construction).

in the hands of the two cousins. In 1921, when one of the journal editors wished to apply for a full-time post as adviser, Ferdinand Springer wrote that he did not intend “to give up or divide [that part of my activity] which comprises making contacts and stimulating projects.” In every special subject he had such excellent authors and editors at his disposal that he “did not consider it effective to create a special post of adviser.” But in 1935 Ferdinand Springer had to change this practice, when his cousin was forced by the Nazis to leave the firm (see p. 345).

Initially, Springer’s internal advisers were scientists, with some of them being full-time journal editors, such as Victor Salle (from 1910) for internal medicine; Arnold Berliner (from 1913) for the natural sciences, especially physics and mathematics; Arthur Hübner (from 1928) for surgery; and Ernst Urban for pharmacy (from 1920). They received a monthly retainer and expenses, but were not employees in a legal sense. In addition there were numerous advisers who had close relations with Springer as author or editor: Richard Courant for mathematics, Max Born for physics (later Karl Scheel also), Richard Goldschmidt for biology (later Fritz von Wettstein), Walter Kaskel (until 1926) followed by Hans Peters for political science and economics, Karl Wilmanns for psychiatry from 1914. Julius Springer, too, had advisers for his engineering programme: for example, Heinrich Dubbel helped him on engineering questions, Max Foerster and after him Ferdinand Schleicher on building engineering, Ernst Foerster on ship-building. They received a regular but usually small retainer fee, and at times additional payments for secretarial help, especially if they had very time-consuming editorial responsibilities. But it was not exceptional in case of doubt to ask advice from authors who had firm connections to the company.

As soon as there was consensus about a publishing project, and the manuscript had been received and found to be of good quality (if necessary, it will have been shown to an adviser), it was handed over to the production department. In those days this was directed by Franz Fischer⁶⁴, and from 1926 by Paul Gosse. There was a special department of six skilled staff-members for medical and technical illustrations. There were also free-lance draftsmen and illustrators, but from 1930 most of this work was undertaken by the *Graphische Kunstanstalt Gustav Dreher* (Graphic Art Institute)⁶⁵.

The journal department, under the direction of Otto Gerstmann⁶⁶ had 25 staff, about the same number as the production



department, half of them women. It looked after 85 journals with 1800 issues annually. Another independent unit was the office of the *Zentralblätter* (Central Abstract Review Journals). It was directed by Adolph Thiele and had a staff of 33. The 18 *Zentralblätter* annually published 175,000 abstract-reviews from 3300 journals.

The advertising department of 14 staff (eight men and six women) was under Theodor Leidl (and later Albert Meyer). It acquired advertisements for 70 medical, technical and pharmaceutical journals. It was quite exceptional for the firm to work with agencies, except in the case of the railway timetable, all advertising acquisition having been “leased” by Mosse. Total advertising revenue in those years ranged from 1.5 to 2.2 million mark and was credited to each journal in its profit/loss accounting. Many journals were profitable only through advertising revenue, with others it merely reduced the loss. (The turnover figures in this chapter are exclusive of advertising revenue.)

What today is the sales department was for many years called *Expedition* (Dispatch). First it checked on credit worthiness, then on delivery. Often orders had to be checked bibliographically or by further inquiry, especially those from abroad, to ascertain what was wanted. Then invoices had to be written, the ordered publication taken from stock, packed and then sent out. Paul Homa was the first person in charge of this department.⁶⁷ He was succeeded by Paul Strohbach who remained in this post until 1945. The department, which had a staff of 28, included the packing room, the messenger service and the stock. On average

317, 318, 319 From left: Franz Fischer was in charge of book production at Springer-Verlag from 1913 to 1936. Otto Gerstmann was head of all production (i. e. books and journals) from 1926 until 1936. Paul Gosse looked after book production from 1926 until 1936 when he took over the direction of all production until 1967.



320 A view of the department of illustrations, largely concerned with making technical drawings ready for printing.

321 Part of the production department. More people posed for the photograph than usually worked in this room.



it dealt with 750,000 books and 2 million individual journal issues annually.

Springer-Verlag did its own deliveries (order fulfilment). Cash from wholesalers accounted for only 4% of the domestic turnover in 1932. Business was regularly conducted with 700 firms, 275 of them located abroad. In addition there were numerous other bookshops which placed only occasional orders. Some were supplied against prepayment or cash on delivery, because they were not known to the firm or had proved to be slow payers. Ninety percent of turnover came from 319 firms, 165 abroad, with just 13 contributing half of it (53.1%). Thus the sale of scientific books at that time was concentrated on far fewer firms than is the case nowadays.

Until World War I Springer-Verlag's promotional activities directed towards the book trade had been confined to announcements of new publications in the *Börsenblatt* and a circular, sent out monthly since 1908, containing information on planned new publications. In addition there were subject catalogues and, from 1922 to 1933 appearing fairly regularly throughout the year, price lists of available books and journals. Those interested in a particular subject were reached also through advertisements in the firm's own numerous journals. Immediately after the First World War these activities were centralised in the newly created "Propaganda Department," which also had the task of sending out review and inspection copies. All of this had previously been the responsibility of the production department, and it was the production department which provided the first head of the new section, Otto Lange. It was in 1923 that the systematic supply of advertising material to institutes, libraries and individuals was taken over by the *Hirschwaldsche Buchhandlung* (Hirschwald

Bookshop). Of course, advertising material was also available for other bookshops, as long as their turnover justified it.

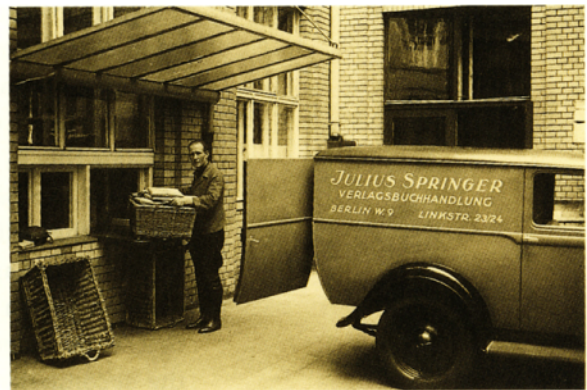
Even before he had been placed in charge of the new propaganda department, Otto Lange had come to the owners' attention through his organisational talents and circumspect correspondence with authors. When the firm's subsidiary was established in Vienna in 1924, Lange was the most suitable of all the department heads to direct the new publishing house. His position in the propaganda department was taken by Paula Strelitz, a niece of Niels Bohr, the Danish physicist. Anna Lange (a sister of the two Lange brothers), who was in charge of personnel, and she were the first women in the firm to be placed in charge of departments. Paula Strelitz emigrated to Copenhagen in 1935 and escaped to Sweden in 1942.

The Hirschwald Bookshop was especially important in promoting Springer publications abroad, and it was largely thanks to its activities that exports increased threefold between 1927 and 1931. Its turnover for 1929 was 6 million mark, but fell to 4 million in 1932 as a result of the economic crisis. Hirschwald's intensive marketing efforts frequently created ill feeling within the German book trade. This is understandable, yet the statistics of the turnover from new publications justified the firm's actions: 85% of Hirschwald's promotion within Germany was of benefit to other (German) booksellers.

Bookkeeping was directed by Otto Rauch from 1923. At that time Springer-Verlag had "only" 2200 debit and 100 supply accounts, but considerable work was generated by thousands of author accounts. A total of between 1.5 and 2 million accounting entries had to be made annually. Two thirds of the 40 or so employees in the department were women. Among the department's task was the gathering of statistical information.

322 The stock of current production was in the cellar of the publishing house, with reserve stocks stored in the suburbs. This turned out to be of great value when much of the main building was destroyed in 1943/44. No large stocks were kept by the Leipzig commission agent. He just passed on to the commissioners of the booksellers those books that he had received in bundles from Springer-Verlag.

323 Deliveries within Berlin were done by the firm's own van.



The Economic Crisis The firm's book production peaked in 1927, at a level which was not surpassed until 50 years later. A statistical table published in the *Börsenblatt* [SCHÖNRÖCK], in part reproduced here (List 9), also divided production into subject areas and the sum of their list prices. (See Note 37 for the differences between the table's figures and statistics of Springer-Verlag.)

It is clear from the figures for the three publishers with the largest numbers of science and schoolbook publications that Springer-Verlag occupied an absolutely leading position in the German-speaking countries. In the following years production in the German book trade steadily decreased as a consequence of the economic crisis. After reaching a high point in 1927 with 31,026 titles it fell to 21,452 in 1932, a reduction of 30.9%. For Springer-Verlag the reduction was "only" 24.6% (500:377 titles). The changes, by year and area, are shown in List 10.

If one were to rely on the figures, the greatest reduction was in medicine. But this is a false conclusion, because it was precisely in those years, 1927–1931, that Handbook production reached its highest point (see p. 258), its individual volumes averaging more than a thousand pages. Although production in engineering was falling, it kept its percentage proportion of total production. There was actually a tendency towards a slight increase in the number of titles. This was due to more intensive efforts in several science areas (biology, mathematics and physics). During the same period there was an increase in the number of journals, by 28 titles, to 125 in 1927.

The firm tried to lower costs by tightening its organisation. The in-house stock department was closed down from October 31, 1928 and its duties taken over by Hirschwald.⁶⁸ The Berlin parent company took over the distribution of books from Springer-Verlag Vienna from July 1, 1929, and from J. F. Bergmann from January 1930.

Springer-Verlag's reaction to the first signs of a recession had been to reduce its production, but the high-price titles at first continued to raise total turnover. The expensive handbooks and the titles taken over from Vogel, in particular its journals, played a major role in this. Thus the domestic turnover in 1931 was still at about the same level as in the year before. (To compare: in 1926/27 the well-known S. Fischer Verlag had a turnover of nearly 2 million mark, in 1932/33 only just 700,000 mark.) However, exports, which had gone up by nearly 50% between 1929 and 1931, were responsible for the overall positive development, as the accompanying List 11 on p. 322 shows.

Subject	No. of titles	Total list price	Average list price
Engineering, crafts	153	2314.10	15.12
Medicine	122	4564.20	37.41
Physics, chemistry	60	1761.55	29.36
Jurisprudence	28	355.35	12.69
Commerce and trade	24	156.70	6.53
Political and social sciences	18	126.90	7.05
Mathematics	13	249.50	19.19
Agriculture and forestry	7	43.95	6.28
Various (philosophy, psychology etc.)	11	183.95	16.72
	436	9756.20	22.38
J.F. Bergmann, Munich	45	1420.10	31.56
Springer-Verlag, Vienna	81	556.64	6.87
Springer-Group	562	11732.94	20.88
<i>In comparison:</i>			
B. G. Teubner, Leipzig	590	2030.65	3.44
Moritz Diesterweg, Frankfurt	378	690.62	1.83
Carl Heymann, Berlin	307	1423.55	4.64

List 9 Book production, Springer and other publishers, 1927

	Medicine	%	Engineering	%	Others	%	Total
1919	78	30.6	81	31.8	96	37.6	255
1920	109	31.9	141	41.2	92	26.9	342
1921	132	36.8	144	40.1	83	23.1	359
1922	163	41.2	132	33.3	101	25.5	396
1923	144	36.1	149	37.3	106	26.6	399
1924	141	37.9	131	35.2	100	26.9	372
1925	161	38.9	146	35.3	107	25.8	414
1926	195	38.7	169	33.5	140	27.8	504
1927	174	34.8	172	34.4	154	30.8	500
1928	177	36.9	155	32.3	148	30.8	480
1929	148	33.9	155	35.4	134	30.7	437
1930	156	37.1	128	30.4	137	32.5	421
1931	153	36.0	116	27.3	156	36.7	425
1932	107	28.4	139	36.9	131	34.7	377
Titles	2038		1958		1685		5681

List 10 Titles published by Springer-Verlag, 1919-1932

	1929	%	1930	%	1931	%	1932	%
Domestic	7193	64.2	7532	60.0	7519	55.7	5996	56.4
Foreign	4011	35.8	5018	40.0	5990	44.3	4637	43.6
	11204		12550		13509		10633	
Adver- tising	2200		2050		1500		900	
Total	13404		14600		14009		11533	

List 11 Domestic, foreign and advertising turnover, 1929–1932
(in thousand mark)

However, when the setback came in the summer of 1931 it was the greater. Wages and salaries, prices and services of all kinds were cut by 10 % by the Brüning government, taxes increased and library budgets drastically cut. Further reductions were suffered by a cut in the subsidies to scientific libraries given by the *Notgemeinschaft* (Emergency Mutual Assistance Association), from 2.7 million mark in 1927 to 370,000 mark in 1931 [NIPPERDEY:117]. In 1931 the Tübingen University Library cancelled 530 German and foreign journals [HANS WIDMANN (1):160], while 7000 foreign journals were discontinued by scientific libraries throughout Germany in 1932 [NIPPERDEY:39]. As librarians tended to hold back before cancelling book purchases when budgets were cut, one can estimate the extent to which the purchasing budget for books had been cut in the preceding years.

Finally, in line with the deflationary economic policy of Chancellor Brüning, all prices of books produced before January 1, 1932 had to be cut by at least 10 %, in accordance with the 4th Emergency Order of 8.12.1931. For a publisher like Springer, which had large stocks of its back-list, this measure reduced the turnover by a few hundred thousand mark.

An incalculable consequence of the ruinous state of the economy was the more than 50 % reduction in advertising revenue over four years, producing a turnover reduction of about 18 % from 1931 to 1932.

Export sales had grown markedly up to 1931, from 3.2 million mark in 1927 to over 4 million in 1929 and after two more years to nearly 6 million. The turnover of the four most important German export companies – Oscar Rothacker, Koehler & Volckmar (Foreign Department), Otto Harrassowitz and Hirschwald

a) *Subjects and Type of Publication*

	Mono-graphs	Hand-books	Text-books	Specialist books	Series	Titles, total	Journals	Issues
Medicine	54	15	15	–	34	118	69	1493
Engineering	100	2	11	11	24	148	17	253
Natural sciences in general, biology	8	4	1	–	4	17	13	183
Mathematics, physics	11	4	2	–	15	32	9	196
Chemistry	17	8	2	–	1	28	5	78
Law and economics	38	–	–	–	–	38	12	190
Total	228	33	31	11	78	381	125	2393

b) *Turnover and Type of Publication (without Advertising) (in thousand mark)*

	Total		Medicine		Engineering		Other subjects	
	TM	%	TM	%	TM	%	TM	%
Monographs	4060	38.2	790	17.0	2365	83.0	905	28.8
Handbooks	3354	31.5	1580	34.0	100	3.5	1674	53.4
Periodicals	2537	23.9	1858	40.0	228	8.0	451	14.4
Textbooks	682	6.4	418	9.0	157	5.5	107	3.4
	10633	100.0	4646	100.0	2850	100.0	3137	100.0

c) *Number of Titles by Subjects and Turnover (in thousand mark)*

Subject	Titles	% of total	Turnover	Proportion%
Medicine, pharmacology	118	31.0	4646	43.7
Engineering	148	38.8	2850	26.8
Chemistry	28	7.3	1308	12.3
Biology, pharmacy	17	4.5	744	7.0
Mathematics, physics	32	8.4	681	6.4
Law and economics	38	10.0	404	3.8
	381*		10633	

* Number of titles is based on special data of annual production higher by four titles than that on List 10 (p. 321).

Ranking of subject areas according to turnover, type of publication and respective number of titles. Advertising revenue by subject not available

List 12a–c *Book and journal production, 1932*

– must be added to this total. Their proportion of the domestic turnover of Springer-Verlag was more than 40 % in those years, and it was estimated that over 60 % of the firm's total turnover was from foreign orders.

The fall in exports caused by the world economic crisis was made worse by drastic currency changes. In September 1932 the pound sterling had been devalued from 20.43 to 12.43 mark. This was followed in December 1931 by devaluation of other currencies that were dependent on the pound, e. g. Japan.⁶⁹ Similarly, the US dollar had fallen from 4.20 to 2.48 mark in April 1933. (This dollar devaluation took full effect later in 1933, when direct exports had been reduced by a further 1.2 million mark.)

Figures country-by-country are available only for 1932. But as the reduction affected all countries, the relationships may be of interest.

Soviet Union	18.8	Sweden	3.5
Japan	16.3	Poland	2.1
USA	11.9	France	2.0
Austria	8.8	Hungary	1.6
The Netherlands	6.6	Denmark	1.4
Switzerland	5.6	Finland	1.1
Italy	5.4	Yugoslavia	1.1
Czechoslovakia	4.8	Norway	1.1
Great Britain	4.2	Others (less than 1%)	4.7

List 13 *List of Springer exports to different countries, in percent of total of 4.637 million mark (without other German exporters). Figures are for 1932*

The total import of these countries was, however, higher by varying degrees. Otto Harrassowitz was very strong as an exporter to the North American market, while Oscar Rothacker exported mainly to Japan. Supplies to the Soviet Union had been centralised with Meshdunarodnaja Kniga since 1927 so that direct sales by wholesalers will have been negligible.