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*The Forgotten Years of Bibendum. Michelin's American Period in Milltown: Design, Illustration and Advertising by Pioneer Tire Companies (1900-1930).*

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## THE TECHNOLOGICAL AND COMMERCIAL BATTLES (1910-1915)

Since its inception in the tire business in 1896 to the first decade of the 1900s, Michelin's ambitions and market context changed substantially. The company competed for continental business from their French bulwark and their strategic centers in Italy—the factory of Turin was operative since 1907—and the United Kingdom—with agency in London since 1905—as well as their delegations in other European countries. However, also had to coordinate their strategies in a global market that also included territories such as the American continent or Australia and New Zealand.

The Michelin Tire Company of Milltown, in particular, focused their efforts between 1910 and 1915 on adequately positioning themselves, as expressed by Vice President Jules Hauvette Michelin in a 1915 November news item: "(...) the last three or four years had been spent in getting together a first class organization, in feeling out the trade and in closing selling arrangements on a large scale with representative tire dealers throughout the country."<sup>1</sup> During this period, the strengthening of traditional competition and the appearance of new emerging firms was accompanied by constant evolution and technological improvement. The French multinational company, within the context of their historical and solid positioning in different markets, was slow in reacting.<sup>2</sup>

### 1. From the smooth and rough

As in many other fields of industry subject to fierce competition, the technological achievements of proven solvency obtained by one tire company were quickly absorbed or imitated by the rest. The payment of royalties for the utilization of patents—or the invalidation of patents in different countries—and the inventiveness of finding similar solutions which were sufficiently original to be patented were the order of the day.

The solid rubber and pneumatic tires produced by different manufacturers in the early years were smooth, at most some models incorporated slight grooves. In addition, the wheel had a round tread, so only a part of the tread had uniform contact with the ground. All this provided less friction and therefore greater speed ... but also provided less traction. In 1904 Continental, closely followed by Michelin,

opted for the flat tread in smooth tires, which allowed for a wider zone of contact with the road surface, better traction and more homogeneous wear and tear.<sup>3</sup> Only two years later the majority of manufacturers—including the Americans G & J and Diamond—had also assimilated and standardized their use.

The smooth surface continued to make driving difficult, resulting in skidding and sliding, which required the use of traction chains on certain occasions. But employing these devices could not be used continuously as they increased the risk of damaging tires. In addition, their correct placement required laborious work and often under adverse weather conditions such as rain or snow. That is why a solution was sought to equip tires with a non-skid tread, integrating the advantages of metal chains into the tire's own cover.

Initially, leather tire protectors were created that were reinforced with small pieces of steel to cover the solid rubber or pneumatic tires, such as those marketed by the French brands Samson (1903), De Fournier, Sanglin, Attila, Excelsior, Fouilloy, Lempereur, Sans Peur (figs. 1-5) or the American Woodworth, Century, Universal, ASB, Davis "Armour," Durable Treads, Mesinger, Slama, Pacific Treads, Walker, etc. (figs. 7-14). These protectors, useful in short distances and at low speeds, generated problems when circulating under normal conditions. The friction of the materials and the heat degraded and endangered the integrity of the tire.

The solution to these drawbacks was the development, between 1904-1906, of leather bands integrating steel studs that were glued to the treads of smooth tires, appearing on the market and known as armored tires, such as Michelin's Semelle,<sup>4</sup> or Rouge Ferré of Continental. In 1907 Pirelli's Neroferrato was the first tire in which the steel studded leather band was fixed into the tire's own mold and integrated into the tire during the vulcanization process. This procedure was quickly adopted by most manufacturers. Some of them, such as the English firm Palmer, developed processes to integrate the metal directly into the vulcanized rubber tread, eliminating the leather.

## 2. Non-skids with an English accent

Despite their acceptance by drivers, this type of tread had certain drawbacks, as evidenced by the provisions and laws enacted in the United Kingdom to limit their use or to charge special taxes. With the improvement of highways and paving of urban roads, the grip and traction provided by non-skid steel studded treads necessary for dirt roads transformed into the erosion and wearing down of new surfaces, deteriorated by the action of metal on asphalted road surfaces. The debate that arose in this regard occupied a series of news items<sup>5</sup> appearing during 1907 and 1908 in the newspaper *The Times*, and concretely in the following case, referring to Kent County:

"The high-speed traffic has a prejudicial effect upon the road surfaces, and as at least 60 per cent of the cars are now fitted with armoured tires much much greater damage is caused than formerly. The steel studs and bands minimize risks of side-slip, of punctures, and wear of tires at the expense of the roads."<sup>6</sup>

"(...) The armourings cut right through the granite surface, making it extremely difficult to repair. It was a waste of material and labour to use ordinary granite chippings for this purpose, as the first car that came scattered the stones all over the road (...) in the county of Cheshire the county surveyor in his estimates for the current year asked for £10,130 more than in the previous one, this sum being largely required to make good the damage caused by steel-studded and other armoured tires."<sup>7</sup>

However, in the British market most of the local and foreign tire companies—through their respective import delegations—offered and continued selling armored tires, such as the British companies Dunlop (1907), North British Clincher (1910), Palmer (1911) and Midland Rubber (1911); the French Michelin, Palladium (1908), Gaulois (1911) or Hutchinson (1912) and the German Continental and Peter Union (1910).<sup>8</sup>

But it was in the UK where precisely some of the technological alternatives to these types of tires were developed. The Dunlop company presented at the I Stanley Automobile Show held in January 1903 at Earl's Court in London their new model of non-skid tires Grooved Tread—marketed in France as *Le Cannelé*—, which had a series of grooves or repeated transverse parallel channels along the tread.<sup>9</sup> The tire casing, made of a single exterior rubber piece, was the result of a process designed to achieve these grooves without adding or removing other materials (figs. 79-81). This model grew in popularity and it became the most characteristic of the firm. As such, it was also marketed in international markets until well into the 1920s. Other companies presented similar models of grooved treads, such as Britain's Avon India Rubber Co. which manufactured armored tires in 1909 and the following year incorporated a cover similar to that offered by Dunlop (fig. 78).

Another type of non-skid tire was the ribbed tread, characterized by a cover completely made out of rubber with longitudinal and parallel grooves and ribs in the tread that extended throughout the tire's circumference. This solution was based on a number of earlier attempts—such as the French *La Force* grooved non-skid covers in 1894—and was developed and perfected by Continental. The German company also competed in Britain—through its subsidiary the Continental Tyre and Rubber Company—with its three-ribbed model named *Three-ribbed*, known in the French market as “*3 Nervures*.” Several British brands resorted to similar solutions. For example, Palmer Tire in 1912-1913 offered its own model also known as *Three-Ribbed*, as well as the *Three Ribbed Tyres* model manufactured by George Spencer, Moulton & Co.

### 3. Rubber non-skid tires

However, a distinct non-skid tread technology created across the Atlantic eventually prevailed. In the United States Charles J. Bailey (1849-1918) developed a solution to provide bicycle tires with an all-rubber non-skid surface, embodied in U.S. Patent number 588.724, issued on August 24, 1897. In 1904, Bailey adapted this technology to automobile tires, launching the successful model known as *Won't Slip* through his Boston-based company C.J. Bailey & Co. In contrast to the British grooved treads, Bailey treads were formed by rows of rubber trim projected outwards, designed to create a rugged surface.<sup>10</sup> These protuberances or cylindrical studs were generated in the same firing mold as the tire covers. Up to that time non-skid tires were equipped with leather strips on which metallic studs were glued or integrated into the rubber tread. Bailey's new technology integrated rubber non-skid studs into the same rubber cover. During the pneumatic tire manufacturing process, the cover was placed inside a two-piece circular curing mold which had the tire pattern engraved on its inner surface. Applying pressure and heat in the curing and vulcanization process, a tire was obtained with rubber studs incorporated in the tread. This rubber tread was popularly referred to as “*rubber non-slip tread*” or “*rubber non-skid tread*” (figs. 14-23).

C. J. Bailey & Co. licensed its invention that same year to three major manufacturers: BF Goodrich, Diamond and Fisk.<sup>11</sup> In 1906 there were already eight American companies that used this technology in their tires: BF Goodrich, Diamond, G & J, Fisk, Goodyear, Hartford, Morgan and Wright<sup>12</sup> ... and

the International Rubber Co. of Milltown, acquired by Michelin the following year.<sup>13</sup> In 1908 several foreign manufacturers, such as the North British Rubber Co. and the German company Hannoversche Gummikamm-Compagnie Altiengesellschaft, were added to the now long list of licensees.<sup>14</sup> In addition to licensing their invention for each manufacturer to implement in their own models, in 1905 C. J. Bailey & Co. launched a rubber belt with the non-slip surface Won't Slip, ready to be glued and vulcanized onto the smooth tread of any type of tire. The different manufacturers in the sector could thus choose to apply them to their tires according to their needs and the orders of their customers.<sup>15</sup>

Vacuum treads were among the different variants of non-skid treads based on Bailey's prototype. These treads had rows of small, hollow extruding cylinders that acted like the suction cups on octopus tentacles, creating a suction effect which—according to the manufacturers—contributed to their grip on the road. This was the solution adopted in 1910 by the Pennsylvania Rubber Co. in their successful non-skid model Vacuum-Cup tires (fig. 24). The same principle of vacuum and suction was applied by inventor and entrepreneur Eleazer Kempshall, an Englishman based in Boston. He employed this concept on his Kempshall brand of tires in 1908, which were manufactured and marketed in the British market. In this particular case the effect was achieved by a series of circular depressions—instead of projections—along the tread (figs. 52 and 79).<sup>16</sup>

By 1910 most of the American manufacturers had opted for Bailey-type treads and the trend spread to Europe. The advantages of the new technology outweighed the proven capabilities of casings employing steel studs. The loss of some of these non-skid metal parts, which were released after continued use, left the leather that supported them in direct contact with the road, at the mercy of friction and wear, which affected the tire casing and quickly destroyed it.<sup>17</sup> Therefore, and in order to avoid further problems, it was necessary to change the cover as soon as some of the metal studs were detached. In the case of all rubber treads, the wearing down of non-skid trim left the tread in the same conditions of use and with the performance of a still operative smooth belt.<sup>18</sup>

In 1912 it was estimated that 40 % of pneumatic tires on the American market were already models with non-skid treads—the sum of the two basic steel-studded and rubber non-skid types—, costing 18-20 % more than smooth tires partly due to increased content of rubber and material.<sup>19</sup> By the beginning of World War I, the technology of non-skid rubber treads had definitively replaced smooth tires and those that used metal reinforcements, and became the international standard for practically all tire manufacturers (figs. 24-25).

#### 4. Advertising covers

The extrusion of rubber on the non-skid covers was employed to show a variety of drawings and to reproduce the logos and initials of each company. The geometrical construction and layout of the studs—often capricious—in most cases was created to obtain a singular differential drawing for the company, a unique and patentable design, rather than to scientifically solve problems of sliding and tire grips. The tiretracks left on wet or muddy ground also constituted an advertising claim for the brand.<sup>20</sup> Slogans, trade names, logotypes and symbols not only competed in press announcements or billboards along the road, they “left their mark” on streets and roads in a continuous publicity struggle for the square centimeters on roadways (figs. 24-25 and 35-41). One of the most notorious designs was Firestone's “NON SKID” [no sliding or skidding] tires created in 1908, which showed these brand words—spelled in thick capital letters—as a repeated motif in parallel and volumetric diagonal stripes along the tire tread (figs. 24-34 and 50).<sup>21</sup>

In reality, these treads were the resulting adaptation that combined the technological solution for the continuous printing of cylindrical rubber buffers (fig. 40) and a curious invention dating from the beginning of the century, used in Europe for different publicity actions as well as in the United States, specifically in the presidential elections of 1904 between the candidates Parker and Roosevelt. This contraption was known in France as the “*bottine imprimeuse*,” and was made up of a series of individual rubber studs mounted in guides or cables that were attached to the tire tread. These modules carved out the corresponding letters of the alphabet. Combining these with the different matrixes and the style for types of foundry, words and phrases were composed. These tires were mounted on light vehicles such as the *voiturettes* and were impregnated with ink so that, when turning and coming into contact with the pavement—as if they were a huge circular rubber stamp—they stamped the typographic message, repeating the process continuously while the motion lasted (figs. 42-47).<sup>22</sup>

## 5. Going countercurrent

Michelin refused to join the revolution that was brewing in American and English territories, defending until the end the technology of their non-skid Semelle tires with metal trim in all international as well as French markets.<sup>23</sup> They followed suit with their Compressed Tread model—named “Carpé” in France—, with continuous longitudinal ribs and grooves in the accordion-like tread, which upon inflating the tire, instead of expanding it contracted and formed a harder and more resistant surface than tires having smooth tread covers.<sup>24</sup> The commitment to keep their catalog of tires unchanged between 1908 and 1915 was unwavering ... and surely imprudent.

Soon the Michelin et Cie. was besieged by the emerging non-skid rubber treads with engraved patterns, known as grooved treads in Britain, which were gaining momentum at an exponential rate. The response of the company was surprising. Perhaps confident due to the outcomes of previous trade battles waged in France against Dunlop and Continental, often successful, they decided to stand firm and start an aggressive campaign against the new tires. But in a globalized market their approach had to tackle several fronts, it was not the simple taking on of a single competitor. Opposing the new technology meant confronting French, British, European and American markets—as well as others in Canada, South America and Australia ...—reflecting the trend that most companies faced.

In a miscalculation, perhaps underestimating the real scope of technological change and the size of their rivals, Michelin et Cie. staged campaigns from 1911 to 1913 in France (figs. 57-62), Belgium (fig. 72), Italy (figs. 73-74), Great Britain (figs. 75, 89-104, 110-112), Germany (figs. 106-109), and also in the United States (figs. 113-123) to discredit the new non-skid tires. Michelin began the endeavor with an advantage in France and Belgium, their natural market and where they exerted hegemony up to that moment. In contrast, in Britain they had directly confront Dunlop in their competitor’s territory and, in Germany, they faced overcoming the reluctance of a historically hostile market. Finally, the company had no authoritative voice in the United States. There Michelin was only one more firm in a long list of medium-sized companies within the sector, a long way from top ranking positions led by powerful US Rubber, Goodyear, Goodrich (who absorbed Diamond in 1912), Firestone and Fisk.

## 6. Michelin vs. Dunlop

The rivalry between Michelin and Dunlop goes back to the last decade of the nineteenth century, when both competed with each other in their respective countries and in much of Europe for the revolutionized bicycle market. The Dunlop Tyre Co. Ltd. was founded in 1889 under the initiative of businessman

Harvey du Cros to exploit John Boyd Dunlop's patents on tire technology. Dunlop, also a partner in the business, sold in 1894 his shares to du Cros, who then took control of the company.

A year later, the leading manufacturer of French bicycles Adolphe Clément obtained a license to manufacture and market Dunlop tires in France, for which he built a factory in Levallois. In 1893 the *Compagnie Française des Pneumatiques Dunlop* was created and in October 1896 du Cros took a step further when, through an investment company in which he participated, the company acquired the two largest bicycle manufacturers in France, Clément and Gladiator as well as Humber, the French subsidiary of British bicycles, with the aim of fitting all production with Dunlop tires.<sup>25</sup>

The appearance of Michelin's removable bicycle tires in 1891, a technological milestone and commercial success, constituted a major challenge to Dunlop's monopoly,<sup>26</sup> and it was in 1896 when Michelin finally took the initiative to commercialize their first tires for automobiles. The development of the motor vehicle caused Britain—which had a practically nonexistent industry—to be invaded before the turn of the century by French and German cars equipped with their respective components and spare parts of origin, such as Michelin tires. Dunlop, on the other hand, did not opt for the motor vehicle world—the first automobile tires manufactured by the British firm were introduced in July 1901<sup>27</sup>—but they opted to strategically protect their market acquiring a series of patents.

In 1896 du Cros obtained the exclusive rights for the British market of inventions by Charles Kingston Welch—British patent number 14.563 of 1890—and William Erskine Bartlett—patent number 16.783 of 1890—, two standard technologies for mounting tires onto rims. Welch's system consisted of a wire tension ring that secured the inflated tire to the rim, while Bartlett's—also known as "Clincher"—was based on the design of a thick rubber or beaded ridge forming part of the edge of the tire cover. When the inner tube was inflated, the thick beaded edges were pressed against the incurved flanges of the rim, thus holding the tire in place.

From April 1896 to September 1904—the period of validity for the patents—borders were legally protected against foreign tires, unless the royalties imposed by Dunlop were paid. The importation of foreign tires was only allowed if they were part of the original equipment on a new vehicle.

In view of these difficulties, Michelin tires were introduced in turn-of-the-century England through such firms as The Clipper Pneumatic Tire Co. Ltd. of Coventry. The company, dedicated to importing continental tires—among them the so-called Clipper-Michelin—was founded in 1896 by John Davenport Siddeley, an engineer originally from Manchester and a former commercial agent of Dunlop between 1894 and 1896. In 1901 he began production of his own range of tires, just before being acquired by Dunlop.<sup>28</sup>

Michelin, however, reacted rapidly and in January 1903 reached an agreement with North British Rubber of Edinburgh, who controlled the rights of Bartlett's license in Scotland. The company aimed to introduce in Scotland their own tires made in Clermont-Ferrand and applying Bartlett's technology. In this way, and despite numerous complaints by Dunlop—rejected by the courts—the so-called "Clincher-Michelin Tyre, Bartlett's patent" could be commercialized in Great Britain (figs. 54-56).<sup>29</sup>

Anticipating the expiration of patents—Welch's expired on September 16 and Bartlett's on October 21, 1904—, in April Michelin established a delegation at Tavistock Place in South Kensington, London. They dispatched their confidant, Marc Wolff, accompanied by three French employees who were later

joined by fourteen staff recruited in situ. On May 11, 1905, the Michelin Tyre Company Limited was legally registered in London with a founding capital of £ 60,000 (equivalent to \$ 291,990 at that time),<sup>30</sup> managed by Wolff and with André Michelin as President. Once the market was open, Michelin incorporated Welch's technology into their tires and took advantage of the new scenario to move the renovated delegation to their new headquarters at 49-50 Sussex Place, also in South Kensington, in November. The Michelin Tyre Co. was represented for the first time with their own stand at the prestigious Olympia Motor Show held at the Agricultural Hall of the same city on November 17-25, 1905.

In 1906 the workforce consisted of 45 workers and expectations for business growth in 1907 were optimistic, a year in which Michelin's international expansion was strengthened by the launch of the Italian factory in Turin and the start of construction work at the American factory in Milltown. Moreover, by 1907 the British market had also become the fastest growing market in Europe, invaded by imports of European and American vehicles as well as the rise of its own industry. There were approximately 53,000 motor vehicles registered in Great Britain versus 31,000 in France and 16,000 in Germany.<sup>31</sup> The new premises at Sussex Place consisted of offices, storage depots and repair shops, a business in which Michelin partnered with the local firm William Warne & Co. Ltd., who had extensive experience in the rubber industry. The consolidation of the commercial network was spectacular: from 58 official distributors in 53 towns across Great Britain in 1905 to 179 distributors in 155 locations in 1906, 460 distributors in 371 towns in 1908 and 834 distributors in 590 locations around 1911.<sup>32</sup>

In February 1908, the Michelin Tyre Co. Ltd. obtained a major accomplishment—and, of course, promotional advantage—the guarantee to be the supplier of the Royal English House which had been granted by King Edward VII. A year later, on January 20, 1911, a unique building—known as the Michelin House or Michelin Building—was constructed in *Art Nouveau* style, inaugurated and built expressly to house their new headquarters in a strategic enclave, at number 81 Fulham Road in London. The architecture and decorative elements of the facade, with polychrome ceramic panels commemorating the milestones of corporate history in automobile competitions, as well as the impressive stained glass reproductions of the mascot Bibendum according to original O'Galop posters, made the building an imposing and permanent advertising claim. Michelin was in a unique and unparalleled position to face their main competitor in its own field, and this resulted in the intensification of advertising campaigns.

## 7. Lessons on patriotism

One of the earliest confrontations between Michelin and Dunlop was captured in the French press in 1900, in a series of patriotically written advertisements published by Michelin. The French company argued that, despite the presence of the *Compagnie Française des Pneumatiques Dunlop*, Dunlop products were actually manufactured in Britain. The same strategy was applied to their other European rival, the German firm Continental, which was well established in France (fig. 57).

In the first quarter of 1911, the publicity department located at the premises of the Michelin House began a provocative campaign in defense of their Square Tread and Semelle models. They also campaigned against the all rubber non-skid covers, especially the grooved tires manufactured by Dunlop. The text of an advertisement published in *The Times* in March stated:

“(...) the Michelin Square Tread is not a fancy pattern tyre; it has no beautiful sculptural design on the tread; there are no knobs, or deep channels to lessen the thickness of the rubber and deface it. Consequently, it presents an even surface to the road, and the wear

is uniformly distributed. Also—and this is most important—you are not paying for rubber which has been gouged and cut away. Elaborate designs in rubber cost hard cash, and the benefits derived are...??"<sup>33</sup>

In September of that same year the issue was brought up again in a controversial full-page advertisement in *The Illustrated London News* (fig. 75). Showing a stack of several tires with different tread designs, it concluded:

“It would seem that they [the rest of the manufacturers] are trying to please customers much in the same way as a picture dealer who, in exhibiting a picture set in a showy frame, diverts the attention of the purchaser from the real object—the picture itself—by enlarging upon the merits of the frame. But where does the value lie? In the painting itself or the frame? The very fact of such a great variety of fancy pattern tyres proves conclusively that none of these patterns is correct. Either one pattern is the best, and should be universally adopted by every tyre manufacturer throughout the world, or all are unnecessary (...) Was I not right when I said it was purely a huge piece of advertising bluff?”<sup>34</sup>

And in an aggressive attack, published in the October issue of *The Autocar* magazine:

“(...) they [Dunlop] have discovered that shouting avails nothing; and in order to try and keep at least a part of the large profit of which they fear to be robbed, they have adopted new tactics, which may be called: ‘The process of selling tyres at 12 to 15% increase upon reasonable prices.’ Assume for one moment that you are a manufacturer who would do this thing. You would adorn the interiors of your moulds with a design in relief to save rubber, of course. Or you would colour the treads of your covers, mixing zinc oxide with your rubber for a yellow effect, litharge for a black, cinnabar for a red. You christen your new products with decorative names—extra-hand-engraved racing covers; triple-traced touring covers, or anything else; you open a special column in your price lists, and advance your prices by 12, 15, or 20%”<sup>35</sup>

But it was when World War I began when positions became radicalized. On the one hand, British companies such as Dunlop, Avon or North British Rubber were inserting patriotic advertisements in the press advocating for the consumption of national products to ward off increasing imports of French and American tires. The benefits had to return to local industries to financially strengthen a country dedicated to the war effort. In addition, national companies participated by supplying tires to the British army and to their allies, such as Australia.

The Michelin Tyre Co. was considered as a foreign company—their tires were imports, and they didn't have an English factory until 1927—and consequently should not benefit from the situation. In the wake of earlier disqualifying exchanges between the two companies, Dunlop inserted a provocative advertisement in British newspapers and magazines at the end of August 1915 under the title “The Contrast” (fig. 95).<sup>36</sup> The text alluded to a contrast, making a comparison between the contribution to the war cause by national firms—such as Dunlop—and the one made by outsiders, such as Michelin. The design of the advertisement is ingenious and the message reflected was stinging. The composition is headed by a rectangle outlined in black, under which a caption is placed, a text that states: “Illustration of foreign tyre makers' contributions to the war.” The frame, which should contain an image, appears ... empty and blank.

Michelin's response to these insinuations was blunt and they accused Dunlop of showing unpatriotic and disloyal behavior, though without naming their competitor. In an advertisement published in early September in *The Times* (fig. 96), a smiling Bibendum headed a long text, in which he denounced:

“A competitor, considering that Michelin is a ‘foreign’ firm, because he is French, has advertised that Michelin has contributed nothing to the War. We are forced to reply that: Michelin has contributed more to the War than any other tyre maker (...) We leave the public to judge whether this competitor, who before the war sold tyres in this country which were ‘made in Germany’ by an affiliated company which claimed at the commencement of the war to be more German and more patriotic than prominent German tyre manufacturers, is justified in talking of ‘foreign’ tyres and impugning the patriotism of a French firm.”<sup>37</sup>

This direct attack on Dunlop referred to the international activities of the British manufacturer that had been initiated around 1889 with the purpose of establishing agencies in America, Canada, Belgium, France ... and Germany. In the latter country the Deutsche Dunlop Gummi Compagnie limited company was established in 1893, with a factory in Hanau, east of Frankfurt, a city where the German bicycle industry was concentrated.<sup>38</sup> From 1907 onwards it became a corporation, and supplied the British market with their products before the outbreak of the war.

Taking advantage of the rift, Michelin returned to the issue in a new advertisement that appeared at the end of September 1915. In this new attack, entitled “Patriotism in Business” (fig. 97), a news item was reproduced that had originally been published a year before in the German newspaper *Rad Welt*.<sup>39</sup> According to Michelin, the Dunlop branch declared itself as a company serving the German national cause, challenged in their patriotic loyalty by their two main German competitors: Continental Caoutchouc & Gutta Hanger Co., Hanover, and the Mitteldeutschen Gummiwarenfabrik, Louis Peter, Aktiengesellschaft, Frankfurt. Addressing the British public and endorsing that an attack was the best defense, Michelin Tyre concluded:

“MICHELIN was therefore compelled to remind the public that this competitor sold tyres before the war, in the British Isles, which were ‘Made in Germany’, and also to disclose the fact that this same competitor had an affiliated company in Germany incorporating the same name, which made a great display of German patriotism during the second month of the war (...) The above mentioned facts have been in our possession for more than a year, and we regret that our competitor's unwise and most aggressive advertisement, entitled ‘The Contrast’ now forces us to make these disclosures.”<sup>40</sup>

## 8. War tribunal

In 1917 the exchange and accumulation of reproaches finally culminated in a legal process after Dunlop filed a complaint. They directly claimed damages caused by Michelin for libel in the advertisements they had inserted in newspapers, general magazines and in the motor sector's technical press, in which, according to the plaintiff, the company's honesty and good faith were attacked. The Michelin Tyre Company, in their defense, claimed that the behavior of their rival was similar to what they were being charged with (figs. 82-85, 89-90 and 95).<sup>41</sup>

The May 1915 advertisement published in English and Scottish newspapers and magazines (fig. 93) that featured a British military ambulance with a flat tire was particularly harmful. In the midst of battle, a

soldier struggled to raise the jack to change the tire. At his side, an accommodating Bibendum offered one of the rings from his torso as a replacement to the relieved mechanic and elated driver. The slogan under the illustration was “The Rib of Life”—referring to the act of Bibendum extracting the tire from his rib cage. The damaged tire clearly portrayed Dunlop’s recognizable Grooved Tread model, which in 1917 constituted 50% of the tires manufactured by the company, who routinely supplied military and health vehicles in the British Army.

Thus, in fact, the hard-line message conveyed in the illustration was that Michelin’s Compressed Tread tires having parallel grooves and ribs were the salvation, versus Dunlop’s Grooved Tread tires, which put the life of soldiers in jeopardy. In this advertisement—according to the plaintiffs—Michelin, with their “tires of Life” qualified by comparison those of Dunlop, positioning them as “tires of Death.”

For the judge and the jury the issue was not whether it was a simple criticism or disqualification of the rival’s products in a fierce commercial dispute, but whether there had been allegations that would infringe upon the honesty of each company. The judge conveyed two questions to the jury that could clarify the dilemma:

- “1. **Question:** Did the defendants (Michelin) say more in their advertisements than was reasonably necessary to protect their own interests? **Answer:** Yes.  
2. **Question:** Were the defendants actuated by malice, that is to say, by an indirect motive other than the mere desire to protect their own interests? **Answer:** No.”<sup>42</sup>

The trial lasted for seven days and was finally handed down on February 21, 1917. The jury’s verdict stipulated the payment of £1,000 (about \$5,000) from Michelin to Dunlop for damages ... and also punished Dunlop with a payment of £750 (approx. \$3,450) to Michelin for the same reason.

## 9. Michelin’s American tires

At the beginning of 1907 the import agency Michelin Products Selling offered the three basic types of tires produced in Europe to the American market: the classic Round Tread model with smooth treads and circular section, the Flat Tread with a smooth-soled flat wheel tread, and the Semelle non-skid model having a leather strip riveted with steel studs glued to the tread.<sup>43</sup> The Compressed Tread model was added to this list at the end of the year.<sup>44</sup>

The implementation of the Michelin Tire Company in the United States was already launched early in 1908 after a prolonged first phase—which continued to develop in the following years—of setting up the factory and production processes. This also included establishing an organizational chart of Managers who were able to administrate different areas, hiring a contingent of trained employees and finally, establishing a commercial network to channel distribution and sales through delegations and shops.

The Compressed Tread model—marketed in France under the name of “Carpe” and in the British market as “Square Tread”—were the first tires manufactured by Michelin in the Milltown factory, which started production by March 1908. It is also likely that smooth tires were manufactured as a base for producing the Semelle model, created by adding the non-skid tread that was presumably imported at this early stage.<sup>45</sup> The extensive publicity campaign advertising the Semelle model in American press from 1910-1911 suggests that it was in those years that the Milltown factory was able to assume complete manufacturing of the model onsite. In addition to inner tubes and accessories for tire repair and

care—constituting a small part of the business—two other items were manufactured at Milltown. One was removable car tires, probably from 1908-1910, and the other, tires and twin wheels for cargo vehicles, known as the Michelin Twins, circa 1912.

## 10. Against sculptured tires

The advertising production of the Michelin Tire Company in Milltown, after intense press campaigns during 1910-1912, suffered a major downturn in 1913, and was practically nonexistent in 1914 and 1915. Their absence was especially pronounced in newspapers and specialized magazines where they usually advertised. Although the United States remained neutral in the early years of the Great War, it is more than likely that the communication between the American delegation of Michelin and the French parent company—as well as Michelin Tyre of Great Britain—was affected. And the same would have occurred with the financial support necessary to maintain promotional activities. This would explain the nearly complete disappearance of advertising insertions in the press.

In this precarious context Michelin transferred the campaign against non-skid tires that they had carried out in Europe to the United States market, preferentially using designs and illustrations produced by the British subsidiary. The strategy—initiated in late 1913 and developed throughout 1914—was based on mailings of promotional brochures, printed in two colors, double-sided and folded, generally as a diptych or triptych, to fit the elongated format of an American envelope. The texts of these leaflets had an impact on the discrediting of tires with rubber non-skid treads which, as stated, “unreasonably increased the price by an extra \$ 5.00.” On the other hand, “Michelin’s Plain Tread tires saved about 17%.”

Several of these leaflets recreated the situation of tire owners being cheated and exploited using a curious character who had previously debuted in the British press. He was a chubby businessman with an inquisitive look and hard features, dressed in a top hat and with a cigar in his mouth. He depicted the stereotyped incarnation of the businessman, the tire tycoon who did not hesitate to make his fortune at the expense of his customers’ good faith. In an obvious ploy of identification, the top hat’s cylindrical crown consisted of a stack of pneumatic covers: Dunlop grooved covers, in the case of the original British character (figs. 110-111). And in the case of the American adaptation of the advertisement, a large representation of the most well-known tire tread cover designs was depicted (fig. 116).

Some of the founders and executives of the American companies that invested—the great majority—in the patterned non-skid tires could have interpreted that this character was portraying them. These individuals may have also felt insulted and treated in a contemptuous way ... but there was no response in that regard. The resulting indifference demonstrated the lack of importance and inadequacy of Michelin’s policy in light of evident market trends. It is more than likely that those who may have felt implicated considered it a waste of their time and effort to respond—stooping down to their level—to Michelin’s propagandistic arguments.

## 11. A universal solution

On September 28, 1915, the United States Patent Office granted Patent Number 47.892—solicited on July 10—for a new tire cover design by Jules Hauvette Michelin (figs. 125). It dealt with the so-called UT, Universal Tread, the first Michelin all rubber non-skid tire with a tread pattern, which represented their bid to contend with the highly competitive American market. The Universal Tread cover, as explained in various news items and press releases,<sup>46</sup> was not based on non-skid rubber projections—such as

Bailey treads—or on grooves that utilized notches, but rather on a flat tread formed by a central rib as the axis for the compact vertical alignment of a repetitive series of thick capital letters of the initial ‘M’ for Michelin. The edges of these volumetric letters were not rounded, but straight, which allowed them to maintain the letter ‘M’ as the tire was worn away. Moreover, in the construction of the casing, between five and eight layers of rubberized woven cotton fabric were used, depending on the size of the wheel, in contrast to what was considered sufficient—from four to seven layers—for other brands.

In fact the UT model did not contribute any significant breakthrough to non-skid technology, beyond the guarantee of quality that Michelin systematically offered. But the firm’s confidence in the new tire was reflected in an intense publicity campaign (figs. 127-130) and in the expansion of the factory, with new manufacturing plants destined exclusively for its production.

The other companies had started with a certain advantage, well positioned with their non-skid models present in the market around three and four years before Michelin decided to launch their own model. With a certain ironic tone the magazine *The India Rubber World*, spokesman of the rubber sector industry, published in early 1916 a brief news item about the new tires:

“For some years past anti-skid treads (...) were things abhorred by the great Michelin company. ‘Sculptured’ treads they called them and most wittily they lampooned them in prose and verse (...) In spite of this, however, every tire company kept its special anti-skid, new companies added theirs until it seemed as if all possible designs had been exhausted. Then, and only then, the Michelin company, realizing perhaps what they had known all along, that tire users craved anti-skids, brought out one of their own (...) The Michelin company gracefully and effectively bowed to the inevitable.”<sup>47</sup>

The Universal Tread tire was also manufactured in 1917 in France and marketed under the name of Pneu Moderne, with a novel aspect for the faithful consumers of Michelin products. Their sculpted treads had a characteristic dark color, as a result of applying carbon black for the first time to the blend of rubber.<sup>48</sup>

## 12. The Brunswick Motor Company

The Universal Tread covers were the result of about three years of testing and experimentation, both on premises set up at the Milltown industrial complex as well as on neighboring public roads. It appears that Michelin’s Testing Department was considered one of the most comprehensive for tire manufacturers of that time, continuously conducting exhaustive checks on tires destined for racing competitions and for regular consumers.<sup>49</sup>

The Testing Department occupied four buildings on the East side of North Main Street, that is, directly across the street from the administrative buildings of the Michelin Tire Co. From there the fleet of cars was managed and used in road tests throughout the entire State and under the most severe conditions. Further information was provided by results of tests conducted by specialized machines that subjected tires to uninterrupted rolling under different conditions.<sup>50</sup>

The employees of the firm who had their own cars also contributed to this process: “New tire covers and inner tubes could be installed every month for a cost of ‘six cents a mile’ in exchange for the used ones being examined by the technicians.”<sup>51</sup> The private cars of several executives were equipped with some

of the first Universal Tread models as part of product evaluation tests. A seven-passenger Lozier traveled 160 miles daily—except for Sundays and holidays—over a two-year period. But the most severe tests of the new tires were made with passenger vehicles of the Brunswick Motor Company.<sup>52</sup>

Milltown Brunswick Motor was legally incorporated on June 9, 1911, with an initial capital of \$5,000 divided into 50 shares with each having a value of \$100. The founding partners were Jules Hauvette-Michelin with 48 shares and Stephen Bridier and John P. Murray, both with one share. The management of the company was initially undertaken by M. L. Cramer.<sup>53</sup>

The purpose of the business was to create and operate a passenger transportation line between New Brunswick and neighboring Plainfield, about 20 miles away, and at the same time serve as a test bed for the development of new Michelin tires. The round-trip route—35 minutes in one direction and ticket price of 50 cents—was made six times daily, except on Sunday when the service was limited to three trips. Two imported French Renault limousines with a modified chassis and painted in gray and black were available for this purpose. Each admitted five passengers, one next to the driver and the other four in the rear. On the morning of June 19, 1911 the service was started with the collection of passengers for the first shift at 8:50 in the morning.<sup>54</sup>

On September 8, 1913, the Brunswick Motor Company with Henry C. Young as President inaugurated a new line, the first that connected the capital of Middlesex County (New Brunswick) with that of Monmouth County (Freehold). The route had four stops: New Brunswick, Spotswood, Englishtown and Freehold, and the trip was repeated three times a day throughout the week except on Sundays, when the line was not put to service. The ride lasted an hour and a quarter in Alco, a powerful limousine brand that traveled at an average speed of 40 km/h. The cost of the ticket was 70 cents.<sup>55</sup>

The Brunswick Motor vehicles of Milltown were used intensively to evaluate all types of tires, whether they were of competing firms—determining their advantages and disadvantages—or the ones developed at the Milltown factory. The Universal Tread model was mounted on all buses of the passenger transport company, which circulated on “both the comfortable paved roads between New Brunswick, Metuchen and Plainfield as well as on the hard dirt tracks of the route between South River, Old Bridge, Spotswood, Englishtown and Freehold.”<sup>56</sup> The sum of the distance traveled by these vehicles covered approximately 300 kilometers per day. As Jules Hauvette Michelin explained in a 1915 statement presenting the new tires:

“We have had a firm conviction that a really satisfactory nonskid tire had not yet been offered to the American public. For several years we have tried out every rubber non-skid made, both on cars belonging to the factory organization, and on the buses owned by the New Brunswick Motor Company. All the various rubber non-skids on the market have been tested to destruction and of course all the results of our experiments have been very carefully recorded.”<sup>57</sup>

## Notes

1. “Mr. Michelin, neutral on war, talks of new tire,” *New Brunswick Times*, November 22, 1915.
2. In addition to their strong presence in Britain, Michelin had agencies in Belgium, Holland and Austria since 1900 and in Switzerland, Italy, Germany and Spain since 1901; Dumond (1993), p. 31. In 1913 the Italian subsidiary had more than 2,000 employees in its factory, responding to the evolution of Fiat and dedicated to exports to the UK, Germany and Austria; Dumond (1993), p. 50. Towards 1913 Michelin had stiff competition with Dunlop for supremacy in the British market of replacement tires, as explained in “Selling American tires in Great Britain,” *Automotive Industries*, September 28, 1922.
3. “A study of flat tread pneumatic tires,” *The India Rubber World*, October 1, 1906, pp. 11-12.
4. The first non-skid car cover of the firm—L’antidérapant Michelin—was presented at the Paris Salon celebrated December 10-25, 1903. The cover featured a band of leather riveted with small metal studs that were firmly attached. “Le Salon de l’Automobile: Sixth International Exposition of the Automobile, du Cycle et des Sports,” *La Nature*, number 1597, January 2, 1904, pp. 66-69.
5. According to the news published in *The Times*: “Automobile notes,” January 29, 1907; “Motor-car traffic and road maintenance,” August 22, 1907; “Motor engineering,” December 4, 1907; “Side slip,” June 23, 1908; “The upkeep of roads,” August 13, 1908; “Road upkeep and taxation,” November 10, 1908.
6. “Motor-car traffic and road maintenance,” *The Times*, August 22, 1907.
7. “The upkeep of roads,” *The Times*, August 13, 1908.
8. As can be seen in the chronicles of *The Times* for the different editions of the Olympia Motor Show in London, which discussed the news of different tire manufacturers. “The motor exhibition at Olympia,” November 19, 1908; “The Olympia Motor Show,” November 17, 1909; “The Olympia Motor Show,” November 4 and 9, 1910; “The Olympia Motor Show,” November 8, 1911; “The Olympia Motor Show,” November 13, 1912.
9. *The India Rubber World*, March 1, 1903, p. 191.
10. In newspaper articles for U.S. motor journals, pneumatic tire covers were often divided into two categories depending on the shape of the tread: depressed tread, that is, those with channels or grooves below the base level of the tread, and raised tread, those that projected rubber studs. This is also indicated in Goodell’s book (1918), p. 65-73.
11. *The India Rubber World*, August 1 and December 1, 1904.
12. It was precisely the patentability of Bailey’s non-skid tread that was one of the main issues of the important litigation triggered after the complaint filed in 1909 by the Republic Rubber Company against their rival Morgan & Wright, who had originally implemented Bailey’s tread and further developed it to create their cover model Nobby. Tod H. Mell, a Republic technician, had developed his own non-skid model called Staggard and obtained a patent for it, patent number 898.907 issued on September 15, 1908. Republic attempted to prove that they were actually the first to develop and patent a non-skid pneumatic tire with rubber studs specifically designed to fit automotive wheels, thus advancing Bailey and other manufacturers.  
After the first ruling in favor of Republic and the consequent appeals of the defendant, the trial ended in May 1912. The proven fact of the existence of similar prior patents—the British patent of Peter Healy “Improved cover or shield for pneumatic tires for cycles or Other wheeled vehicles” number 20.544 of 1895 and Bailey’s American patent number 588.724 of 1897, although both were for bicycle tires and non-motor vehicles—caused the judge to finally dictate the invalidation of Republic’s patent. The rest of the industry, who had also embarked on the production of their respective non-skid treads, applauded the decision.

- “Holds Nobby tread infringes Staggard,” *Motor Age*, January 4, 1912; “Republic sustains Staggard Patent,” *The Automobile*, January 4, 1912; “Republic enjoins ‘Nobby’ treads,” *Automobile Topics*, January 6, 1912; “Nobby tread decision appealed,” *Automobile Topics*, January 13, 1912; “Republic-Morgan & Wright appeal argued,” *Motor Age*, April 11, 1912; “Non-skid tread patent killed in Final Court,” *The Automobile*, May 16, 1912; “Staggard tread patent held invalid,” *Motor Age*, May 16, 1912.
13. “Bailey’s Won’t-Slip tires,” *The India Rubber World*, October 1, 1905. Advertisement in *Cycle and Automobile Trade Journal*, March 1907.
  14. “Trade new notes,” *The India Rubber World*, December 1, 1908.
  15. “Bailey’s Won’t Slip tire band,” *The India Rubber World*, July 1, 1905. In the same magazine and about other products of the company: “Bailey’s won’t slip crutch tip,” March 1908 and “Bailey’s Won’t Slip Rubber Heels,” May 1910.
  16. See news item “Kempshall’s non slip tire tread,” *The India Rubber World*, March 1, 1908, p. 189 and April 1, 1908, p. 221.
  17. As explained by the press release emitted by the Michelin Tire Company and published in the article “Steel-studded anti-skid tires should be repaired when worn down,” *The New York Times*, October 15, 1911.
  18. “Tires, proper use and care needed,” *The Automobile*, January 11, 1912, p. 180.
  19. “Non-Skid treads feature of 1912 tires,” *Motor Age*, January 25, 1912, p. 43; “Tires, proper use and care needed,” *The Automobile*, January 11, 1912, p. 179.
  20. This differentiation by tire track and the different patented tread designs nowadays constitute an area of study as a specialty of forensic criminal investigation. There are interesting books on the subject, such as William J. Bodziak’s *Tire Tread and Tire Track Evidence: Recovery and Forensic Examination* (2008) or Peter McDonald’s *Tire Imprinting Evidence* (2000) both published by CRC Press, Florida.
  21. The Firestone patent for “NON SKID” treads was requested by Stacy G. Carkhuff, employee of the firm, on September 4, 1908, and finally granted on April 14, 1914, with registration number 1.093.310.
  22. “La bottine imprimeuse,” a news item published on October 6, 1904 in the newspaper *La Liberté* of Freiburg, Switzerland. The invention is also discussed in a chapter of Henry Baudin’s *L’enseigne et l’affiche*, Geneva, Switzerland, Impr. Atar, 1905.
  23. The name Semelle for non-skid treads with metal studs became Michelin’s own trademark after various legal disputes over its commercial use. For example, in March 1910—after more than one year of deliberation—, the Austrian courts ruled in favor of Michelin in their dispute with the local subsidiary of German Continental, and granted the French company exclusive rights to the name. “Michelin owns Semelle,” *Chicago Examiner*, March 27, 1910.
  24. *The Automobile*, October 24, 1907. The Compressed Tread model was first shown in America at the II New York Automobile Show held November 2-9, 1907 at Madison Square Garden. “Tires at the Madison Square Garden Show,” *The India Rubber World*, December 1, 1907, pp. 71 and 72.
  25. Nibblet y Reynolds (2005), pág. 22.
  26. The British patent for the Michelin detachable wheel was registered on September 18, 1891. Nibblet and Reynolds (2005), p. 42.
  27. In France, Dunlop’s start-up date for automobile tires was in 1902, through the Dunlop Pneumatic Tire Compagnie (France) with a factory in Argenteuil. Dumond (1993), p. 579.
  28. Siddeley circumvented Dunlop’s tight control over patents through the importation and manufacture of Clipper-Continental, licensed by the Continental Caoutchouc & Gutta Percha Company of Hanover. Some of the information can be found in the book *Armstrong Siddeley Motors* listed in

the bibliography (pp. 10-15) and in the text *John Davenport Siddeley, his life & times*, a lecture by Derek JS Ainscow (grandson of the honoree) at the Coventry Techno Center on November 8, 1999. It can be accessed at the website [www.siddeley.com](http://www.siddeley.com).

29. "Motor tires for England made in France," *The India Rubber World*, January 1, 1904, p. 122.
30. "Great Britain," *The India Rubber World*, July 1, 1905, p. 355. The news reported that the creation of the company would allow for the establishment of a Michelin tire manufacturing and marketing business associated with the local company William Watne & Co., whose General Manager James Burbridge was a representative in the Board of Directors for the newly formed British Michelin.
31. Nibblet and Reynolds (2005), pp. 21-22.
32. Ibid.
33. "Bibendum Square Tread," advertisement in *The Times*, March 10, 1911.
34. "Bibendum on tyre fashion," advertisement in *The London Illustrated News*, September 9, 1911.
35. Advertisement in *The Autocar*, October 1911. The same text, adapted to the French market, was repeated in the allegation "Peinture et sculpture pour pneumatiques," *Automobile Club du Nord*. Official monthly bulletin of the Société Régionale d'Encouragement de l'Automobile-Club du Nord de la France, Roubaix, November 1911.
36. Advertisement in *The Observer*, August 29, 1915.
37. Advertisement in *The Times*, September 3, 1915.
38. Erker (2005), p. 150.
39. According to Michelin's advertisement, the text of Dunlop's German subsidiary was published on September 9, 1914 in the German newspaper *Rad Welt*.
40. Advertisement in *The Manchester Guardian*, September 23, 1915.
41. The development of the process could be followed in the interesting and detailed chronicles on the subject, published in *The Times* on February 13, 14, 15, 20 and 21, 1917. Other publications also devoted their attention to the case, such as British *The Indian Rubber Journal*, with articles on February 17 and 24 or the American *The India Rubber World*, in the news "Judicial decision" published on April 1, 1917, p. 399.
42. "The motor tyres libel action: result," *The Times*, February 21, 1917.
43. As shown in the advertisement in the American monthly magazine *Motor*, January 1907, p. 13.
44. "Tires at the Madison Square Garden Show," *The India Rubber World*, December 1, 1907, p. 72.
45. As set out in the United States Court of Customs Appeals ruling on February 7, 1914, ratifying the decision of the Board of United States General Appraisers, that leather bands imported by Michelin be taxed at 15 % of their value. This figure resulted from the application of two taxes. On the one hand, the stipulated 5 %, tax for strips of leather and hide intended for use in the manufacturing of tire treads, similar to that of leather belts. But 10 % was added to this amount as these pieces were already cut and could not be considered as raw material, but rather as an article manufactured at source. This judgment dismissed Michelin's lawsuit against customs duties on the import of leather strips which were used to manufacture Semelle tires in the United States. "Three companies receive drawbacks," *The Automobile*, February 12, 1914; and "Recent custom rulings," *The India Rubber World*, April 1, 1914.
46. "Michelin brings out non-skid," *The Automobile*, October 14, 1915; "New Michelin tire produced," *The Indianapolis Sunday Star*, October 17, 1915; "Michelin develops new type of tire," *La Crosse Tribune*, November 27, 1915; "The Michelin tire," in the newspaper of Safford, Arizona, *The Graham Guardian*, June 1, 1917; "The Michelin Tire Plant," *The Rubber Age and Tire News*, August 25, 1917, p. 447.
47. "The triumph of 'sculptured' tread," *The India Rubber World*, February 1, 1916.
48. Dumond (1993), p. 43.

49. Jouas (2005), p. 67.
50. Works Progress Administration, *History of Milltown*, p. 32.
51. Jouas (2005), pp. 67-68.
52. "New Michelin tire produced," *The Indianapolis Sunday Star*, October 17, 1915; "Michelin develops new type of tire," *La Crosse Tribune*, November 27, 1915.
53. "New corporations," *Trenton Evening Times*, June 15, 1911; and in the compilation *Corporations of New Jersey*, part 1, p. 95 (listed in the bibliography).
54. "New Brunswick to Plainfield in 35 minutes by Renault cars of Brunswick Motor Company," *The New Brunswick Times*, June 9, 1911; "Plainfield auto line starts Monday," *The New Brunswick Times*, June 17, 1911.
55. "New auto line joins this city to Freehold," *The New Brunswick Times*, September 6, 1913.
56. "Michelin develops new type of tire," *La Crosse Tribune*, November 27, 1915.
57. "Mr. Michelin, neutral on war, talks of new tire," *The New Brunswick Times*, November 22, 1915.

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*L'Automobile en Seine & Oise*, monthly magazine of the Club Automobile Seine & Oise. Information on the non-skid tires manufactured by J. Fouilloy, mentioned in number 5 January 1905, p. 24.

**L'ANTI-FOUILLOY BROIE L'OBSTACLE**

LE SEUL  
NE FATIGUANT PAS  
LES TALONS

AVEC BANDE  
DE ROULEMENT  
DÉMONTABLE

**PROTECTEUR ANTI-DÉRAPANT DÉMONTABLE**  
MONTAGE EN 5 MINUTES

Etablissements **J. FOUILLOY**, 14, Rue Neuve Popincourt. **PARIS** TÉLÉPH. 928-86

**LE PROTECTEUR**

**'SANGLIN'**

“b...l'.....”

**MAIS! N'EN CRÈVE PAS**

**50% d'ÉCONOMIE** sur l'usage de vos PNEUMATIQUES

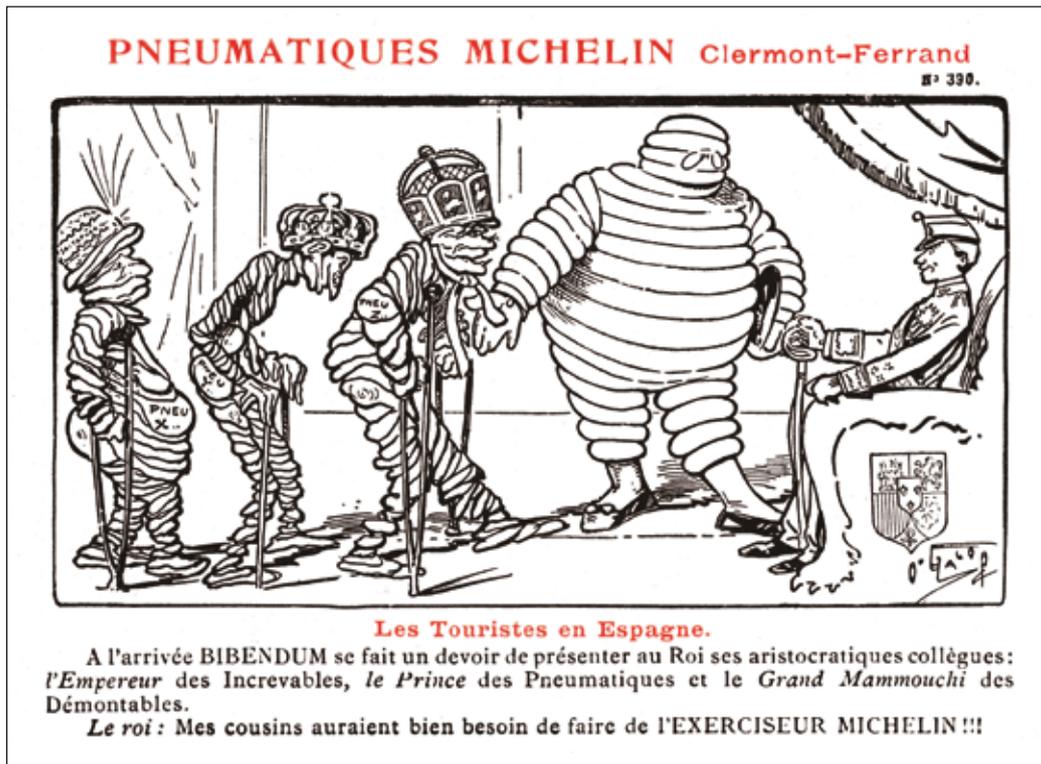
**- USINE -**  
25, Rue de Courcelles  
**LEVALLOIS-PERRET**

**PROTECTIVE COVERS.**

By 1915 the non-skid protective covers had fallen into disuse since tire treads started to incorporate these elements, in the form of tires with metallic trim or in the form of rubber studs that were an inseparable part of the tires. This page shows two unique examples of protective casings marketed in France. Both refer to the famous phrase coined by André Michelin that had become a slogan of the brand: “Le pneu Michelin boit l’obstacle” [the Michelin tire drinks up obstacles]. One of them, the cover manufactured by the firm J. Fouilloy—active in 1905 and with workshops at number 14 rue Neuve Popincourt in Paris—used the motto “L’Anti-Fuilloy broie l’obstacle” [The Anti-Fuilloy crushes the obstacle]. The other was the Sanglin cover manufactured by H. Brionne et Cie. around 1911-1912 in the town of Levallois-Perret. Their slogan omitted the words of Michelin’s motto, replacing each letter with dotted lines, as in a riddle—of course with an obvious solution—: “Le protecteur Sanglin ‘b... l’.....’ mais! n’en crève pas” [The Sanglin cover boit l’obstacle but does not burst].

1. Lithograph poster for l’Anti-Fuilloy. France, 190 x 124 cm, 1904.

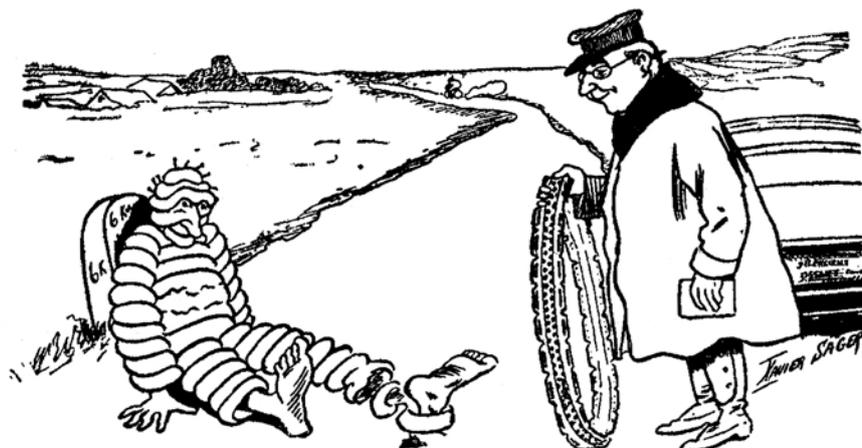
2. Lithograph poster for Protecteur Sanglin. France, 80 x 120 cm. c.1911



**BIBENDUM AND HIS COURT.** In the above scene, illustrated by O'Galop, an inflated Bibendum overflowing with health—the King of tires—presents on the occasion of the Paris-Madrid race, his three emaciated colleagues to the King of Spain: Pneu X, The Emperor of the “unpuncturables;” Pneu Y, the Prince of Tires; and Pneu Z, the Great Mammouchi of the detachables. Aggressive Michelin comparative advertising utilized against rivals served as a reference for other related product advertising campaigns such as non-skid covers. In the image below, the French illustrator Xavier Sager (Lyon, 1881-Paris, 1969) presented in 1907 a broken and dismembered Bibendum, the result of a lack of foresight: every tire can extend its life thanks to the Attila protective cover. Attila covers were manufactured by Durand & Cie., managed by Ch. Durand and located at 178 Pereire Boulevard in Paris. The advertisement below was published in a Barcelona magazine, where the product was also commercialized. It is more than likely that the illustration originally appeared in the French press and the etching plate was provided directly to the import agent for promotional use.

3. Promotional vignette from Michelin, 1903. Illustrated by O'Galop.

4. Advertisement published in the Barcelona magazine *Los Deportes*, January 26, 1907. Illustrated by Xavier Sager.



*El Pneu:*—¡Socorro! ¡Socorro!... voy á morir reventado.  
*El Chauffeur:*—¿Qué edad tienes?  
*El Pneu:*—15 días.  
*El Chauffeur:*—Eres demasiado joven para morir, toma este *Protector Attila* y tus días se verán centuplicados.



**RIVETED SKIN.** The novelty and uniqueness of pneumatic covers and tire treads peppered with non-slip metallic studs gave rise to humorists of the time trying out their biting irony. The above image shows the cover illustration of a French satirical magazine that depicts an automobile accident with the driver caught between scrap metal. The doctor—supposedly short-sighted—examines the tire cover confusing it for the skin of the accident victim and emits a surprising diagnosis: “—Is it a fracture? —No, my friend, you have the measles!”

5. Cover of *Le Pêlé-Mêle*, November 5, 1911. Illustrated by the French artist Mauryce Motet (1886-1963).





### LUCKY STAR.

The poster shown here, which in no way constitutes an attack against Michelin, recreates a complex scene in which a celestial nymph—star or comet—helps a couple and their driver who are in trouble. The inner tubes of their car, incarnated as a type of pneumatic man, have been punctured and need to be repaired. The goddess extends her finger pointing to the precise place where the leaked air must be blocked. In the background, an intact Bibendum cyclist waves to the group, convinced that they do not need help to solve the problem. The presence of the Michelin mascot is explained in the billboard on the right, in which it states that the product is available for sale in different stores, but specifically highlights its availability in establishments associated to Michelin's commercial network. "Comète," an advertised product for which no references have been found, could refer to a patch applied with a sealant solution, which is what the nymph seems to be holding in one of her hands. It seems to be the case as the same generic name of "comètes," small hollow rubber stoppers used as an emergency remedy, were known in France to quickly seal off tire punctures produced by nails and pointed cylindrical objects. This is explained in the article "Autour du pneu" published in the *Revue Mensuelle du Touring-Club de France*, December 1913.

**6. La Comète.** Lithograph poster. Dimensions: 160 x 120 cm. Limited printing of 150 copies made by the printer Paul Dupont, Paris. Signed by the painter, illustrator and caricaturist Pierre-Georges Jeannot (1848-1934).

# WISCONSIN TIRE PROTECTOR

PATENT PENDING

NO PUNCTURES NON-SKIDDING



**PROTECTORS that PROTECT**

The only Protector made of Rubber and Leather. The only Protector guaranteed to stay on the wheels. It is Puncture Proof and harmless to tires. As more than 90 per cent of the serious automobile accidents are caused by skidding, their extreme anti-skidding qualities make them a necessity.

THE WISCONSIN TIRE PROTECTOR are made from three thicknesses of specially woven fabric covered with the best non-slip rubber, the entire side of them is a layer of fine chrome leather, all the three being fastened with the same device as have been found that it is absolutely necessary to have a combination of rubber and leather to prevent the PROTECTOR from skidding and moving loose on wet and muddy roads.

Thus constructed the tread is securely laced to a steel spring wire ring formed in such a way that there is at all times a tension on the lacing holding the Protector firmly in place. The ring is in turn attached to the hub. All parts of the Protector are of the best possible workmanship and material, are strong, durable, and an ornament to any car.

Write for further details and prices of Protectors, giving size of wheels.

**Wisconsin Tire Protector Company,**  
 Factory, Havana Pool, Wis.  
 1231 Michigan Avenue, CHICAGO, ILL.

# PROTECT YOUR TIRES

WITH DAVIS STEEL TIRE "ARMOR"

AN IDEAL TIRE PROTECTOR FOR AUTUMN AND WINTER MOTORING

Easily adjusted, ENTIRELY covering the tire, in its smooth, snug, flexible, powerful grasp—ALWAYS sustaining it, ALWAYS taking the strain from it, and in mud, snow or even ice it CANNOT skid.



**DOUBLE THE LIFE OF YOUR TIRES**

We give an IRON-CLAD INDEMNITY BOND guaranteeing TO AT LEAST DOUBLE the guaranteed mileage of any reputable tire manufacturer. This BOND also covers our 20-year service guarantee.

DAVIS STEEL TIRE "ARMOR" is strong, easy-running, long-wearing, most economical tire protector on the market.

Although made of steel, it will run as lightly and will not detract one particle from the resiliency of your tire, and it offers an absolute guarantee against Blows, Skidding, Punctures, Rim-cutting, Stone-bruise or Rot-wearing.

DAVIS STEEL TIRE "ARMOR" is easily attached in five minutes and has no lagging to come "unfastened," no springs to stretch or break, no "inner shoes" to pinch the tubes, no resiliency destroying "fillers." It always holds as firmly to the tire that its support is absolute. The tire is always good.

If you have not as yet seen this DAVIS "ARMOR" TIRE PROTECTOR in actual service on a car in your community you had best

**MAIL THIS COUPON TODAY** for it is worth a whole lot of money to you provided only that you act quickly.

Our 1914, 16-page, 3 color Art Booklet will be mailed free for the asking.

**AGENTS WANTED EVERYWHERE.**

**AMERICAN PROTECTOR.** This double page layout shows a variety of non-skid tire protectors manufactured in the United States. These leather, rubber and metal "covers" enclosed tires and were fastened to wheel rims by means of different tensioning mechanisms.

7. Wisconsin Tire Protector (Wisconsin Tire Protector Co.) advertisement module published in *The Automobile*, March 26, 1908.
8. Davis Steel Tire "Armour" (Davis Robe & Armour Co.) Advertisement in *Automobile Dealer and Repairer*, September, 1912.
9. Slama Tire Protector (Slama Tire Protector Co.) advertisement module published in *The Automobile*, May 28, 1908.
10. ASB Tread and Tire Protector (Queen Manufacturing Co.) advertisement module published in *Motor Age*, 1909.
11. Woodworth Tread (Leather Tire Goods Co.) advertisement module published in *Motor Age*, 1909.
12. (opposite page) Illustration detail of an advertisement for the Durable Tread-Colorado Tire & Leather Co. in *Motor*, May, 1913.
13. (opposite page) Advertisement for a company selling various brands of tire protectors in *The Horseless Age*, June 22, 1910.
14. (opposite page) Walker Auto Tire Bands advertisement module published in *Motor*, May, 1909.

# THE SLAMA PROTECTOR



ALL STEEL  
 DETACHABLE  
 NO PUNCTURES  
 NO SKIDDING  
 POSITIVE TRACTION  
 ADJUSTABLE  
 SLIPPING FRONT  
 OR SIDE WAYS  
 IMPOSSIBLE  
 GIVES ALL TIRES  
 INDEFINITE LIFE  
 NEVER CAN  
 HEAT, STRETCH OR  
 SOAK UP MUD  
 GLASS CUTS OR  
 SIDE WEAR FROM  
 RUTS OR STONES  
 ENTIRELY DEFIED

A PROTECTOR THAT PROTECTS WITHOUT PENALTIES FOR CONTINUOUS SERVICE

rain or shine, and does duty every inch of the way, saving wear on the tires, protecting them from ruts or rocks and eliminating the danger of punctures or blow-outs. Gives the easy riding qualities of Pneumatics with the care-free qualities of solid tires.

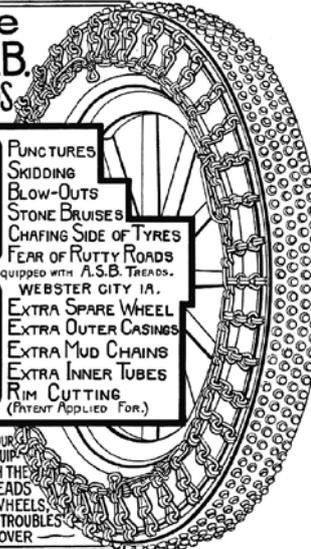
Write for catalog TODAY and profit by the information.

**WILL LAST INDEFINITELY**

**POSITIVE TRACTION ALWAYS**

**Slama Tire Protector Company**  
 612 EAST 15TH STREET KANSAS CITY, MO.

# The A.S.B. TREADS



WE GUARANTEE THAT THE A.S.B. TREAD AND TIRE PROTECTOR OVERCOMES THE OBJECTIONS TO ALL OTHER LEATHER TREADS. TEN DAYS' TRIAL, AND IF NOT SATISFACTORY, YOUR MONEY WILL BE REFUNDED.

**NO** PUNCTURES  
**NO** SKIDDING  
**NO** BLOW-OUTS  
**NO** STONE BRUISES  
**NO** CHAFING SIDE OF TYRES  
**NO** FEAR OF RUTTY ROADS

If car is equipped with A.S.B. TREADS.

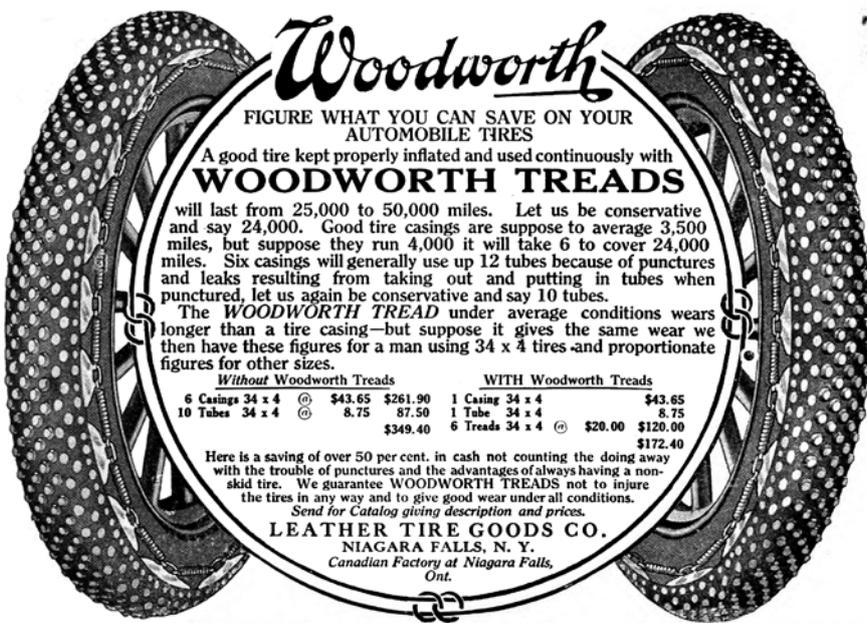
**NO** EXTRA SPARE WHEEL TREADS.  
**NO** EXTRA OUTER CASINGS  
**NO** EXTRA MUD CHAINS  
**NO** EXTRA INNER TUBES  
**NO** RIM CUTTING (Patent Applied For.)

WHEN YOUR AUTO IS EQUIPPED WITH THE A.S.B. TREADS ON ALL 4 WHEELS YOUR TIRE TROUBLES ARE ALL OVER

**AUTOMOBILE OWNERS**

We want a few cars fitted with the A. S. B. Treads in every town in the United States for advertising purposes, and for these sample sets we are going to give you a big discount from our price list, which will only go to a very few. But the first one in a city or town to order a full set will get the grand prize discount. See that you are that ONE.

QUEEN MANUFACTURING COMPANY, Box 224, WEBSTER CITY, IOWA



# Woodworth

**FIGURE WHAT YOU CAN SAVE ON YOUR AUTOMOBILE TIRES**

A good tire kept properly inflated and used continuously with **WOODWORTH TREADS** will last from 25,000 to 50,000 miles. Let us be conservative and say 24,000. Good tire casings are suppose to average 3,500 miles, but suppose they run 4,000 it will take 6 to cover 24,000 miles. Six casings will generally use up 12 tubes because of punctures and leaks resulting from taking out and putting in tubes when punctured, let us again be conservative and say 10 tubes.

The **WOODWORTH TREAD** under average conditions wears longer than a tire casing—but suppose it gives the same wear we then have these figures for a man using 34 x 4 tires—and proportionate figures for other sizes.

Without Woodworth Treads		WITH Woodworth Treads	
6 Casings 34 x 4	\$43.65	1 Casing 34 x 4	\$43.65
10 Tubes 34 x 4	87.50	1 Tube 34 x 4	8.75
	\$349.40	6 Treads 34 x 4	\$120.00
			\$172.40

Here is a saving of over 50 per cent. in cash not counting the doing away with the trouble of punctures and the advantages of always having a non-skid tire. We guarantee **WOODWORTH TREADS** not to injure the tires in any way and to give good wear under all conditions. Send for Catalog giving description and prices.

**LEATHER TIRE GOODS CO.**  
 NIAGARA FALLS, N. Y.  
 Canadian Factory at Niagara Falls, Ont.

**Your Tires will Now Last Three Seasons instead of One**




## GRAND PRIZE DISCOUNT

to the first one in your city ordering a full set of our Steel Studded and Imported, Chrome Tanned, heavy Leather, Steel Side Chain with Heavy Steel Adjusting Springs

### Tire Protectors

Will get this grand prize discount from price list.

**We Guarantee our Tire Protectors to please or we will return you your money.**

Write Now and get the Grand Prize Discount

**A. S. BURNELL**  
 Address Lock Box 421, Webster City, Iowa.  
 Reference, any Bank in our city.

### Walker Auto Tire Bands

*THE BEST*

#### TIRE PROTECTOR OR BLOW OUT PATCH IN THE WORLD

*A Few Sections on a Weak Spot or Blow-Out Does the Business*

**Sample Section Sent On Receipt of Price**

WHEN YOU HAVE WORN YOUR CASINGS UNTIL THEY ARE BEYOND SERVICE EVEN WITH THE AID OF OTHER PROTECTORS, WALKER TIRE BANDS WILL HOLD



MOUNTED PER SECTION	3 in. 40 crns	PLAIN PER SECTION	3 in. 30 crns
	4 - 50 -		4 - 50 -
	41 - 70 -		41 - 60 -

Size of Tire represents amount of Bands required to cover a tire complete. Example—30 in. tire 30 bands.

**WALKER AUTO TIRE BAND CO.**  
 339 East Washington Street, Indianapolis, Indiana

**NON-SKID RUBBER.**

The patent for non-skid rubber tire covers was one of the most profitable investments for C. J. Bailey & Co., having their own store in Boston since 1890. But the bulk of the company-manufactured rubber products and their respective patents consisted of waterproof fabrics, household sanitary products—such as hot water bottles, brushes, massaging rollers or belts for gymnastic exercise apparatus—and parts for mechanical appliances.

The concept of rubber cylindrical studs as a non-skid element was also applied to shoe soles and adaptable "Won't Slip" pads to keep chairs and furniture stable.

15. Advertisement showing the portrait of C. J. Bailey in *The Century Magazine*, May 1890.

16. Advertising module in *The Century Magazine*, June, 1891.

17. Advertising module in magazine, 1906.

18. (opposite page)

Advertisement in the monthly magazine *Cycle and Automobile Trade Journal*, December 1909.

Patentee and Proprietor of  
**C. J. BAILEY, BAILEY'S FAMOUS RUBBER BRUSHES.**



**Indorsed and sold in every part of the world for beautifying and purifying the skin.**

A lady writes us: "You ought to let the ladies know that the use of your 'RubberBrushes' several times a day will vivify the complexion, smooth out the wrinkles, and prevent the flesh from shrinking by producing plumpness. I know of a number who are using them with the most gratifying results."

**PRICE-LIST :**

Bailey's Rubber Bath and Flesh Brush .....	\$1.50
Bailey's " Toilet Brush .....	.25
Bailey's " Hand Brush (size 3 x 1 1/4 in.) .....	.50
Bailey's " Blacking Dauber .....	.25
Bailey's " Ink and Pencil Eraser .....	.25
Bailey's " Tooth Brush, No. 1 .....	.25
Bailey's " Tooth Brush, No. 2 .....	.35
Bailey's " Shampoo Brush .....	.75
Bailey's " Teething Ring .....	.10

Send us a postal note, and we will forward any of the above, prepaid, upon receipt of price. For sale by all dealers in Toilet Goods.

**(Agents Wanted.)**

**C. J. BAILEY & CO.**

**Boylston Building, Boylston St. Boston, Mass.**



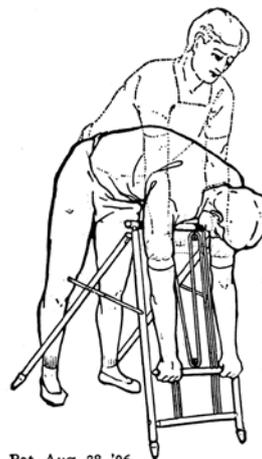
**BAILEY'S RUBBER COMPLEXION BRUSH.**

It is especially constructed for *massaging the skin*. It removes all *roughness and dead cuticle*, *smoothing out the wrinkles*, rendering the skin soft and pliant, and tinted with a *healthy glow*.

For physical development it is recommended by the *highest in the profession*, for *improving the circulation, exercising the muscles*, and promoting a *healthy action of the skin*.

For the bath it will be found a perfect luxury by both *old and young*. The brush is all one piece and as soft as silk. **Price, 50 cents.** Mailed upon receipt of price. For sale by all dealers in Toilet Goods. Manufacturers and Retailers of Rubber Goods.

**C. J. BAILEY & CO. 22 Boylston Street, Boston, Mass.**



**SAWING WOOD**

is the best exercise known for man. This health-giving, muscle-building, flesh-reducing, blood-circulating exercise is obtained by using

**Bailey's Rubber Exerciser**

It exercises every muscle of the body, reduces corpulency, and quickens the circulation, which is a sure help for indigestion, insomnia and vertigo. Practical for men, women and children. Neat, compact, portable. Size 36 x 20 inches. Can be used in the parlor or bed-chamber.

Sent prepaid by us upon receipt of price, \$3.50.

**C. J. BAILEY & CO.**  
 22 Boylston St., Boston, Mass.

Pat. Aug. 28, '06

**NON SKID  
RUBBER  
TREAD**

NOTHING BUT PERFECT TRACTION AND THE TRAIL PROVES IT.

IT MAKES ALL ROADS SAFE FOR RIDERS IN DRIVING FAST OR SLOW.

*The*  
**Bailey**  
*"Wont Slip" Tread Tire*

**Why take the risk? Accidents from skidding are more numerous and fatal than from any other cause. The time to use Bailey "Wont Slip" Tread Tires is all the time on all wheels of Motor-Cars and Motor-Bicycles. Do-it-now. They are as essential as a Rudder is to a Ship.**

*For sale by all dealers throughout the world. Write us for descriptive booklet.*

**C. J. BAILEY & CO., Patentees, 22 Boylston Street, Boston, Mass.**

LICENSED MANUFACTURERS—in the United States

THE B. F. GOODRICH CO., Akron, Ohio	G. & J. TIRE CO., Indianapolis, Ind
THE DIAMOND RUBBER CO., Akron, Ohio	GOODYEAR TIRE & RUBBER CO., Akron, Ohio
THE FISK RUBBER CO., Chicopee Falls, Mass.	MORGAN & WRIGHT, Detroit, Mich.
HARTFORD RUBBER WORKS CO., Hartford, Conn.	EMPIRE AUTOMOBILE TIRE CO., Trenton, N. J.
CONSOLIDATED RUBBER TIRE CO., New York City	

**N. B.—The extra cost of the BAILEY TIRES on the List more than smooth of same make is 2½ and 3 in., \$1.50 each; 3½ in., \$2.00 each; 4 in., \$2.50 each; 4½ in., \$3.00 each; 5 in., \$3.75 each.**

**BAILEY**

**"WON'T SLIP" TREAD TIRES**

MADE AND SOLD  
BY NINE FIRMS AND THEIR  
BRANCHES AND ALSO  
BY ALL DEALERS

THE B.F. GOODRICH CO.  
AKRON, OHIO.

THE DIAMOND RUBBER CO.  
AKRON, OHIO.

THE FISK RUBBER CO.  
CHICOPEE FALLS, MASS.

CONSOLIDATED RUBBER TIRE CO.  
N.Y. CITY.

HARTFORD RUBBER WORKS CO.  
HARTFORD, CONN.

EMPIRE AUTOMOBILE TIRE CO.  
TRENTON N.J.

G. & J. TIRE CO.  
INDIANAPOLIS, IND.

MORGAN & WRIGHT  
DETROIT, MICH.

AUTOMOBILE  
MOTORCYCLE  
BICYCLE  
TIRES.

GOODYEAR TIRE AND RUBBER CO.  
AKRON, OHIO.

WRITE US FOR DESCRIPTIVE BOOKLET  
**C. J. BAILEY & CO. PATENTEES.**  
22 BOYLSTON ST., BOSTON, MASS.

THE  
**BF GOODRICH**  
RUBBER CO  
AKRON-OHIO

### Eight of the Largest Tire Manufacturers

make and sell the

## BAILEY "WON'T SLIP" AUTOMOBILE MOTOR BICYCLE TIRES, AND BICYCLE "WON'T SLIP" TREAD BANDS.

THE  
**DIAMOND**  
RUBBER CO  
AKRON-OHIO

THE  
**FISK**  
RUBBER CO  
CHICAGO ILLS  
MASS

Nothing but *SUCCESS*: nothing but *PRAISE*: nothing but *SATISFACTION*, for

### BAILEY "WON'T SLIP" TIRES

All the principal events of the past three years, such as the **Glidden Tours** of 1905 and 1906, mountain climbing, endurance tests, trans-Atlantic Tours, non-stop runs, New York to Daytona, Fla., run, were all won on **BAILEY'S "WON'T SLIP" TIRES**. They are *praised* by everyone that rides them, as they make every car a *winner*. They give *satisfaction* to every rider, as they give perfect traction on all conditions of surface. They prevent skidding, lessen the liability of punctures, and give more durability. They are to the automobile what the *rudder* is to the *ship*. For further evidence, ask the man who rides them. You see them everywhere. Order your new car equipped with them. Have your old tires covered with **BAILEY TREAD BANDS**. All manufacturers, dealers and repair men supply them throughout the United States. Write us for description booklet.

**C. J. BAILEY & CO., Patentees,**  
22 Boylston St., Boston, Mass.  
U. S. A.

**G & J**  
TIRE CO.  
INDIANAPOLIS  
IND.

THE  
**INTERNATIONAL**  
RUBBER CO  
MILWAUKEE WIS

*N. B.—The extra cost of Bailey Tires on the LIST more than amounts of same make, is 2 1/2 and 3 inch, \$1.50 each; 3 1/2 inch, \$2.00 each; 4 inch, \$2.50 each; 4 1/2 inch, \$3.00 each; 5 inch, \$3.75 each.*

**GOODYEAR**  
TIRE AND  
RUBBER CO.  
AKRON-OHIO

**HARTFORD**  
RUBBER WORKS  
CO  
HARTFORD  
CONN

*N. B.—Now ready: Bailey's "Won't Slip" tread BANDS for covering all makes and sizes of smooth, or partly worn tires at nominal cost by Bailey the manufacturer. Write for price.*

**MORGAN**  
AND  
**WRIGHT**  
DETROIT  
MICH

**CIRCLE OF INFLUENCE.**

The manufacturing patent for the non-skid covers of C. J. Bailey & Co. was licensed to most of the tire industry manufacturers. The advertisement shown on this and the adjoining page shows the large firms that incorporated this technology, such as BF Goodrich, Empire, Goodyear, Hartford, Morgan & Wright, G & J, Consolidated, and Fisk.

19. (opposite page) Advertisement in the monthly magazine *Cycle and Automobile Trade Journal*, June 1909.

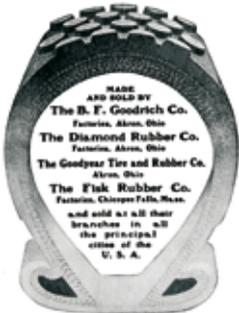
20. Advertisement in *Cycle and Automobile Trade Journal*, March 1907.

21-23. Advertisements published in *Cycle and Automobile Trade Journal*, April 1905, and August and November, 1908.

**There's Many a Slip**  
BUT NEVER WITH  
**BAILEY'S "WON'T SLIP" TIRES**

THEY ARE TO THE AUTOMOBILE WHAT A RUDDER IS TO THE SHIP

**Non-Skid Rubber Tread**



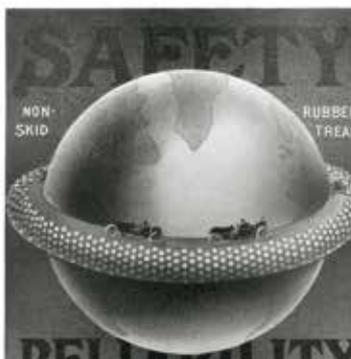
MADE AND SOLD BY  
The B. F. Goodrich Co. Factory, Akron, Ohio  
The Diamond Rubber Co. Factory, Akron, Ohio  
The Goodyear Tire and Rubber Co. Akron, Ohio  
The Fisk Rubber Co. Factory, Chicago Falls, Mass.

and sold at all their branches in all the principal cities of the U. S. A.

*N. B.—Now ready: Bailey's "Won't Slip" tread BANDS for covering all makes and sizes of smooth, or partly worn tires at nominal cost by Bailey the manufacturer. Write for price.*

The best tire manufacturers of the country make and sell Bailey Tires; the best automobile manufacturers supply them; the wise dealers advocate them, and the knowing drivers insist upon having them. They are the *fastest, surest, most reliable and durable* tires made. The traction is perfect, and they *positively prevent skidding*. Write us for booklet.

**C. J. Bailey & Co., Patentees**  
22 Boylston St., Boston, Massachusetts, U. S. A.  
Our Tires will be on exhibition at all the Automobile Shows



NON-SKID RUBBER TREAD

**RELIABILITY**

THE WHOLE AUTO WORLD RIDES ON  
**BAILEY'S "WON'T SLIP" TREAD TIRES**

SKIDDING  
Bailey's "Won't Slip" Tires

C. J. Bailey & Company  
22 Boylston St., Boston, Mass.

**TO SAVE TIME AND AVOID ACCIDENTS**  
RIDE ON  
**BAILEY'S "WON'T SLIP" TIRES**

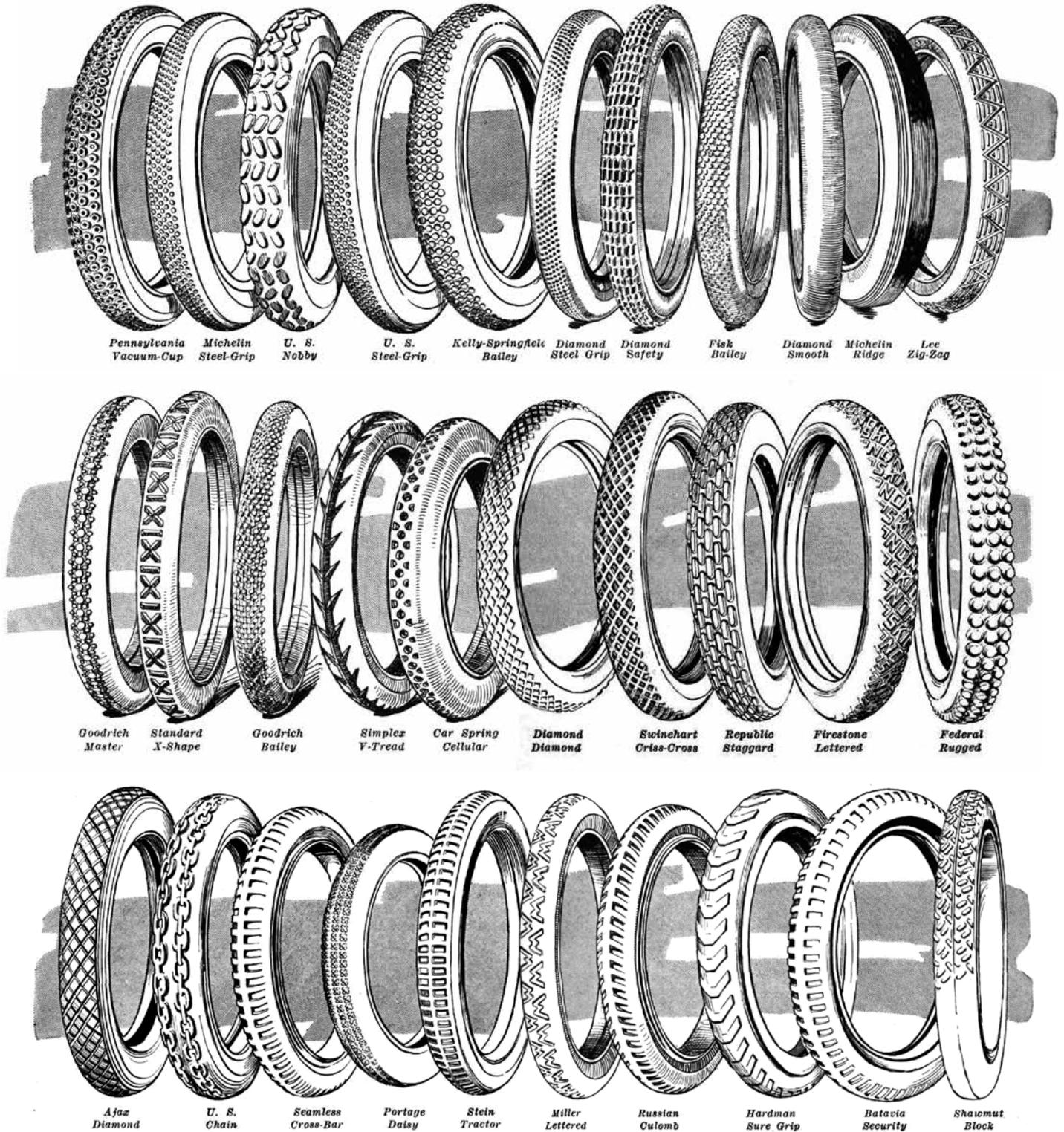
**NO SKIDDING SMASHUPS DELAYS**  
NON SKID RUBBER TREAD



**THE BAILEY "WON'T SLIP" TREAD**

See how in this cut they have proved to riders in the past 7 years that it is the only true principle that prevents skidding, punctures and gives durability and perfect traction. They are to the automobile what a rudder is to the ship. Beware of imitations.

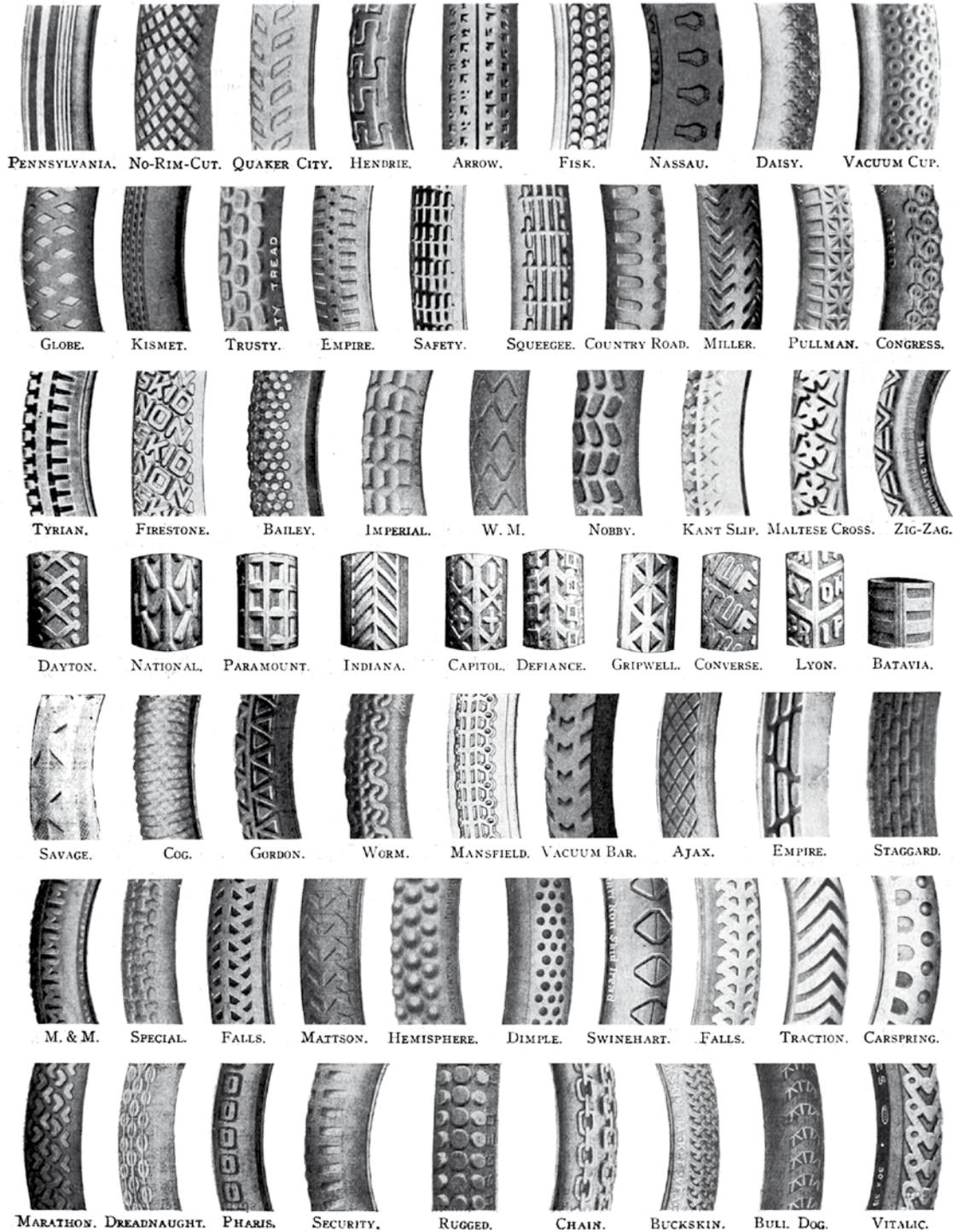
**C. J. BAILEY & COMPANY, Patentees**  
22 BOYLSTON STREET, BOSTON, MASS.



**BAS-RELIEFS FOR ALL TASTES.** The proposed Bailey covers, created in 1904, were soon incorporated by several manufacturers and served as a starting point for developing similar casings. The above image depicts the non-skid models presented in the year 1912, from which we must subtract three—amongst those shown in the first row—with metallic plugs, the so-called steel grip models for U.S. Rubber, Michelin and Diamond. The rest are covered entirely with rubber. Among the most popular were Vacuum cup treads from Pennsylvania Rubber, Lee's Zig-zag model, Republic Rubber's Staggard, Firestone's Non-skid volumetric letters, and U.S. Rubber's two proposals. The latter included reliefs depicting two strands of metallic Chain Tread treads as well as Nobby tread, a model using elongated studs placed in distinct alternating directions.

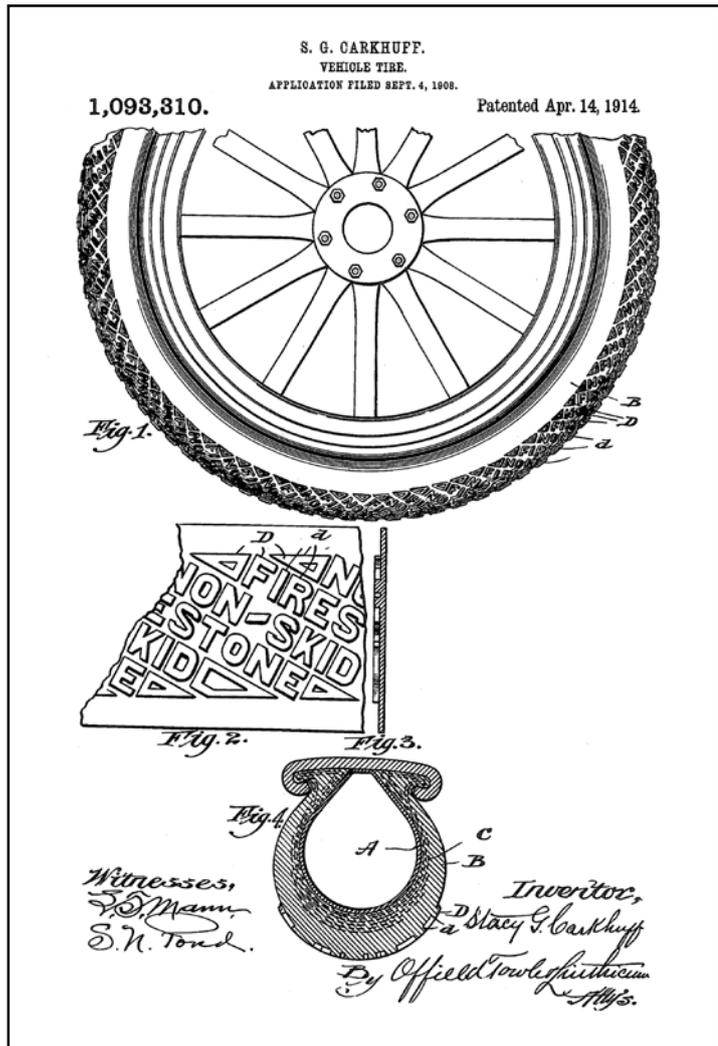
24. Illustrations of the article "Non-skid treads feature of 1912 tires" published in *Motor Age*, January 25, 1912.

Some American Automobile Tire Treads.



**NEVER ENDING CATALOG.** During the following years the pages of motor and rubber industry magazines periodically reported on the various models of non-skid tires on the market, most of them customized with a characteristic tire tread pattern that was conveniently patented.

25. "New models in tire covers," a section that was also common in *The India Rubber World* magazine, February 1, 1915.



**PATENTED TRACK.**

In 1908, Firestone's new NON SKID tires were patented and marketed, with capital letters incorporated into the tread pattern as non-skid studs shaping the "FIRESTONE NON SKID" message. Three years later the tread was redesigned, opting for bigger and more compact studs, eliminating the brand name—relocating it to the side of the tire—and repeating the word design NON SKID.

26. Comparison of the two different models.

27. Advertisement in *Motor World*, 1916.

28. Diagram attached to the 1908 patent.

**Firestone**  
**NON-SKID TIRES**

**The Universal Landmark**

The good impression of these Non-Skid letters goes deep into the highways and byways of the world. It has made the name **Firestone** the landmark by which motorists know the safe, sure way to travel.

For a deep, clear-cut hold in mud; for a safe ride on oily road or boulevard—specify Firestone

**NON-SKID**  
*The Imprint of Safety*

Your nearest dealer has Firestones or can get them promptly.

**Tube Bag Free** We will give you a fine waterproof tube bag if you will send us your dealer's name and address and the make of tires you use. Also ask for Free Book, "Care and Repair of Tires," No. 41.

**Firestone Tire and Rubber Company**  
Akron, Ohio  
Branches and Dealers Everywhere  
"America's Largest Exclusive Tire and Rim Makers"



**ENGRAVED IN STONE.**

The surname of the company founder, Harvey Firestone, initially served to create an identifying brand name. It was a literal graphic translation, since firestone is a type of stone that supports fire and high temperatures, usually used to line the interior of furnaces and forges. The image on the left shows the letterhead used in corporate and commercial stationery for the Firestone Tire & Rubber Co. of Akron in 1912. It depicts how the name of the firm is permanently engraved in stone. This concept of stone-like solidity and immutability as well as the tire track on the road served as models in the campaign for NON SKID tires with anti-skid rubber studs.

- 29. Advertisement in *The Country Gentleman* magazine, 1916.
- 30. Emblem of the Firestone Tire & Rubber Company, 1912.

# NON-SKID

-An  
*Exclusive  
Sign*

**T**HE word "Non-Skid" was originally a general term, but now, in the minds of thousands of motorists, by right of extras in service, it has come to stand for—

## Firestone

Those powerful angled slabs forming the Non-Skid letters are just so much added rubber—just so much added mileage.

This extra wear with sure skid-prevention has linked inseparably the words "Non-Skid" and "Firestone."

Yet they cost no more than the ordinary.

*See price list below. Your dealer will supply you.*

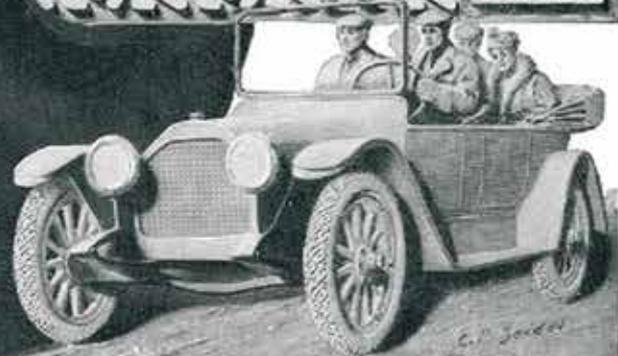
**Firestone Tire and Rubber Co.**

*"America's Largest Exclusive Tire and Rim Makers"*

Akron, Ohio—Branches and Dealers Everywhere

**Firestone Net Prices to Car Owners:**

	Case Round Tread	Case Non-Skid	Grey Tube	Red Tube
30x3	\$ 9.40	\$10.55	\$2.20	\$2.50
30x3½	11.90	13.35	2.60	2.90
32x3½	13.75	15.40	2.70	3.05
34x4	19.90	22.30	3.90	4.40
34x4½	27.30	30.55	4.80	5.40
36x4½	28.70	32.15	5.00	5.65
37x5	35.55	39.80	5.95	6.70
38x5½	46.00	51.50	6.75	7.55





**LOW AND HIGH RELIEFS.**

The distinctive feature of the NON SKID tires was their "sculptured" tread, which was how the original non-skid rubber studs were referred to. What better idea than to graphically translate this particularity by creating illustrations that mimicked the effect of bas-relief? In order to effectively achieve this three-dimensional concept, Emory Pius Seidel (1881-1954), an artist and sculptor from Chicago, was employed. Between 1912 and 1916, Seidel shaped the campaign in a multitude of different advertisements, some of which are shown on this double page.

- 31. (opposite page) Advertisement published in *National Geographic*, 1915.
- 32. Advertisement published in *The Literary Digest*, August 17, 1912.
- 33. Advertisement in *Life* magazine, 1913.
- 34. Advertisement in magazine, 1913.





**Mark the Horse-Shoe Tread —**  
 Nearly a million motorists know this efficient, distinctive tread as the mark of a great tire.

But more than the efficiency of a quiet-running, sure-footed tread underlies the thirty-fold increase in Horse-Shoe demand during the past five years:—

It is unquestionably due to the quality uniformly built into this tire since the beginning, and to our steadfast will to build America's best tire.

Every man and every machine in our great new plant is trained toward that end—and every Horse-Shoe Tire proves it.

"Remember the Horse-Shoe Tread"

**RACINE HORSE-SHOE TIRES**

RACINE AUTO TIRE COMPANY, RACINE, WISCONSIN

**GROOVES AND MARKS.**

In addition to typographical and initial designs, the non-skid tread patterns of many companies used a modular motif, often the company's own symbol. Other firms chose to design geometric motifs that were transformed into symbols of identity and identification, such as BF Goodrich's "Safety First"—in the image below—, five vertical parallel rods crossed perpendicularly in the middle by a horizontal one, or the characteristic interlacing of cleaved and intersecting lines forming Goodyear's diamond studs.

- 39. Racine's advertisement in *The Saturday Evening Post*, 1919.
- 40. Advertisement for The Star Rubber Company in *Motor Age* magazine, 1919.
- 41. Advertisement for BF Goodrich in *The Automobile* magazine, December 25, 1913.

**A Real Skid-Proof Tread**

**How Often Do You Sell a Customer?**

UNLESS he comes to you for practically every tire he needs he isn't getting the tire he wants.

For this is a fact. *Few* few motorists care to "shop around" for tires. If they "shop" it's evident they are still looking for the tire they can depend on to give them full value in mileage and service in exchange for their money.

Sell them the dependable tire and make steady customers of them. Keep them coming back to you for all the tires they need. That's profitable selling.

STAR Hand-Made TIRES are the answer. Want the details?

**THE STAR RUBBER COMPANY**  
 AKRON'S PLASTER TIRE BUILDERS  
 1903 CROSBY ST., AKRON, O.

BRANCHES:  
 New York: 226 W. 57th St.  
 Chicago, Ill.: 228 Franklin St.  
 Kansas City, Mo.: 1922 Grand Ave.

**Not Accidentally Good—But Made Good Always!**

**STAR CORD TIRES**

**SAFETY FIRST**

The Tread that makes the Brake Effective

**Five Bars and a Cross Tie—the Safety First Symbol**

Five thick, tough Goodrich rubber fingers— They dig down through mud, slush and ooze; they clean and grip the road. They stop the skid before it starts. They give you lower-cost mileage because of the extra thickness of rubber at the point of contact.

**Goodrich Safety Tread Tires**  
*Best in the Long Run—Best in the Short Stop*

Don't experiment. Don't take chances. Look for the five bars and the cross-tie when you choose a non-skid tire. Read the reduced prices below. Better still, tear out this price list and hand it to your dealer.

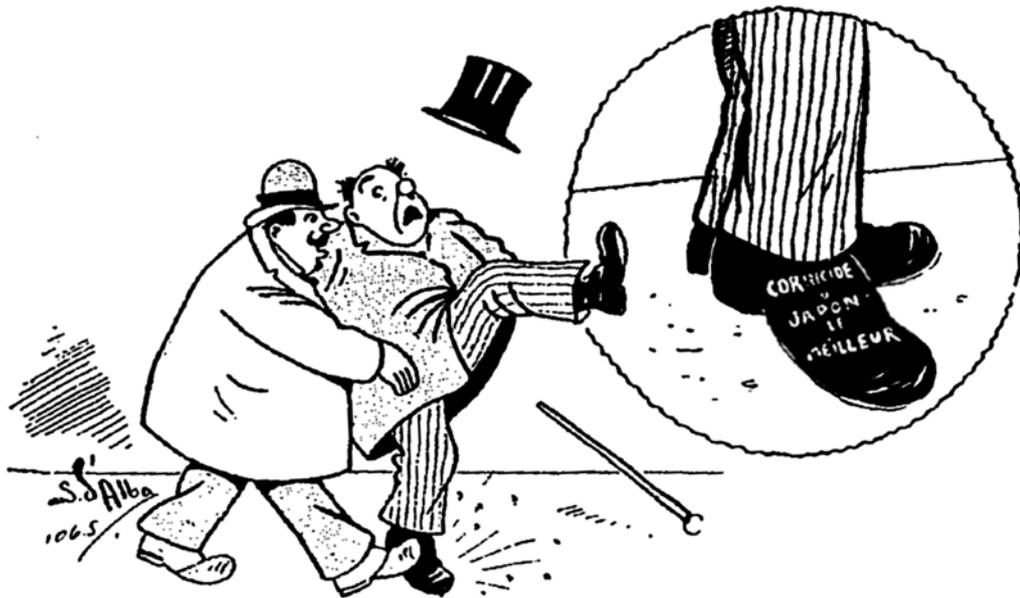
Don't pay more than the prices named here for the accepted standard non-skid tires:

Size	Smooth Tread Price	Safety Tread Price	Size	Smooth Tread Price	Safety Tread Price
30 x 3	\$11.70	\$12.65	34 x 4½	\$33.00	\$35.00
30 x 3½	15.75	17.00	35 x 4½	34.00	36.05
32 x 3½	16.75	18.10	36 x 4½	35.00	37.10
33 x 4	23.55	25.25	37 x 5	41.95	44.45
34 x 4	24.35	26.05	38 x 5½	54.00	57.30

Dealers almost everywhere have Goodrich Tires in stock or can get them for you from one of our branches or depots.

Factories: AKRON, OHIO  
**The B. F. Goodrich Company**  
 There is nothing in Goodrich Advertising that isn't in Goodrich Goods

Branches in All Principal Cities



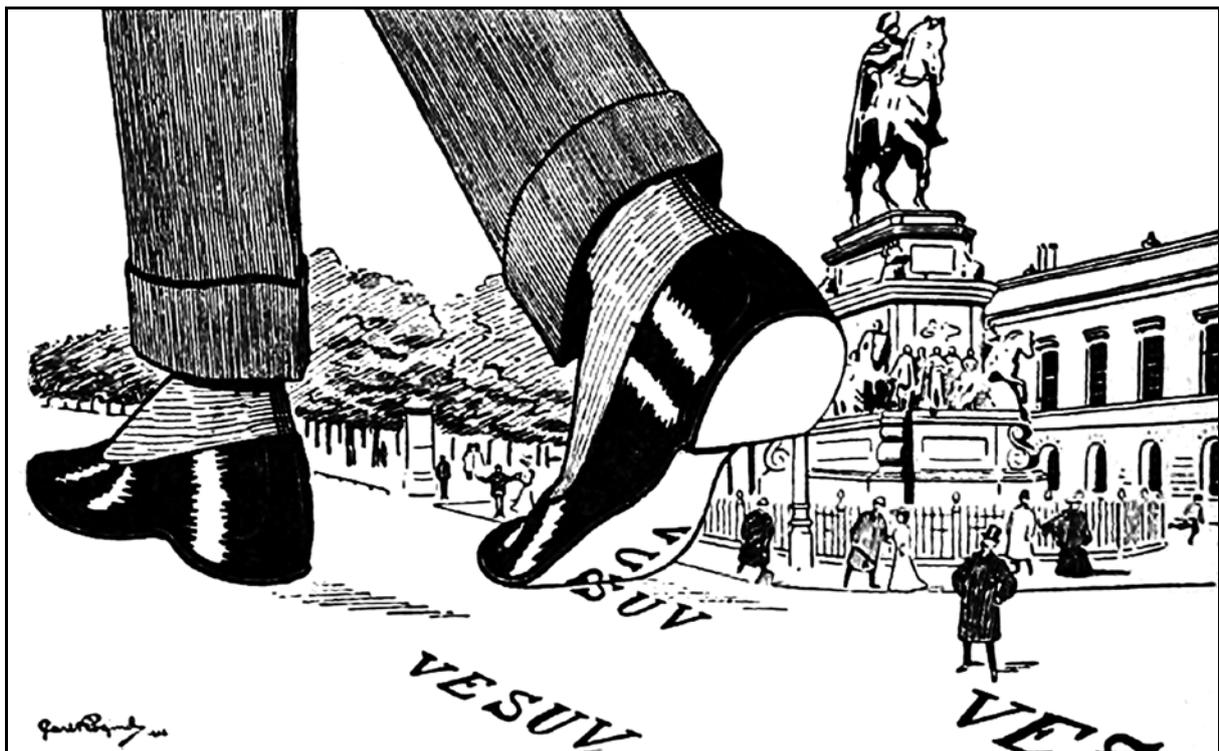
### BOTTINE IMPRIMEUSE

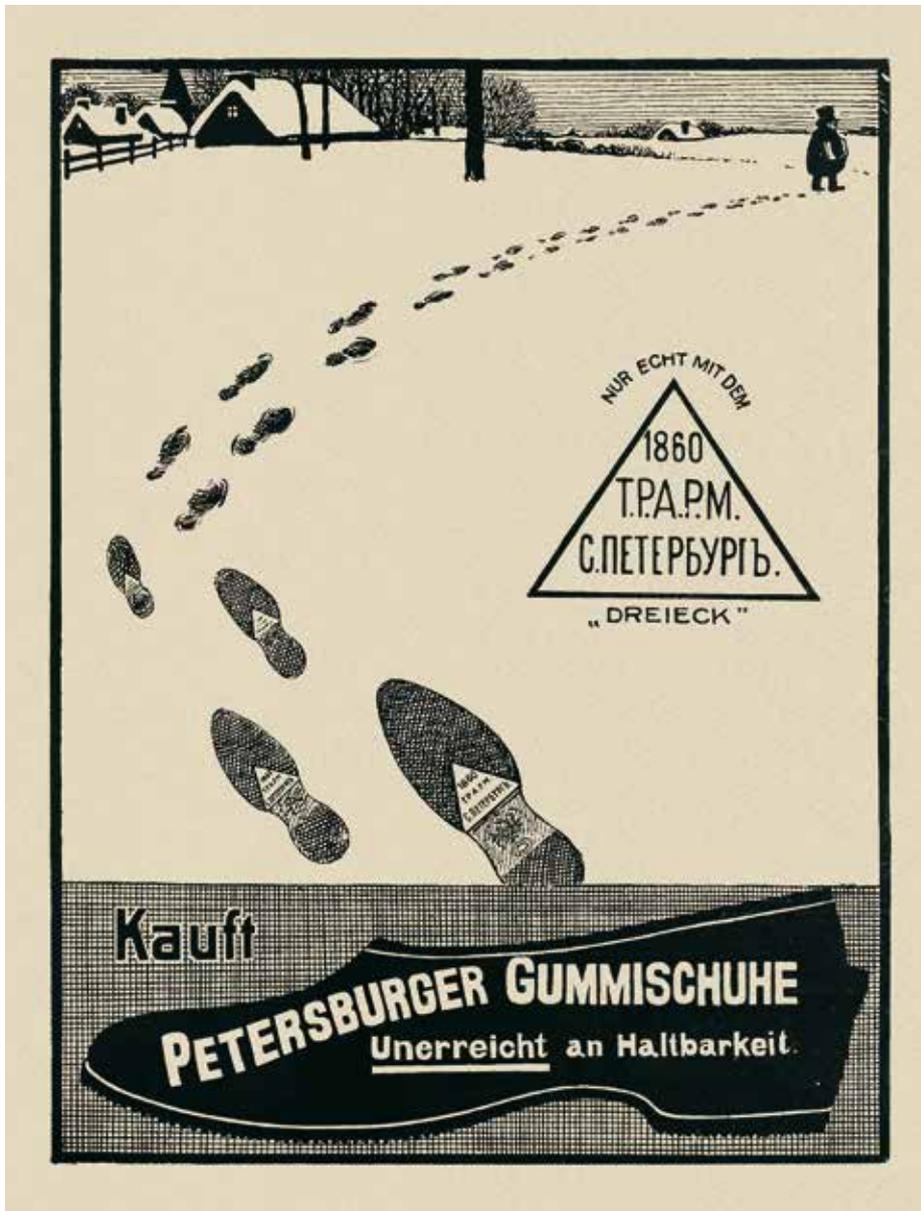
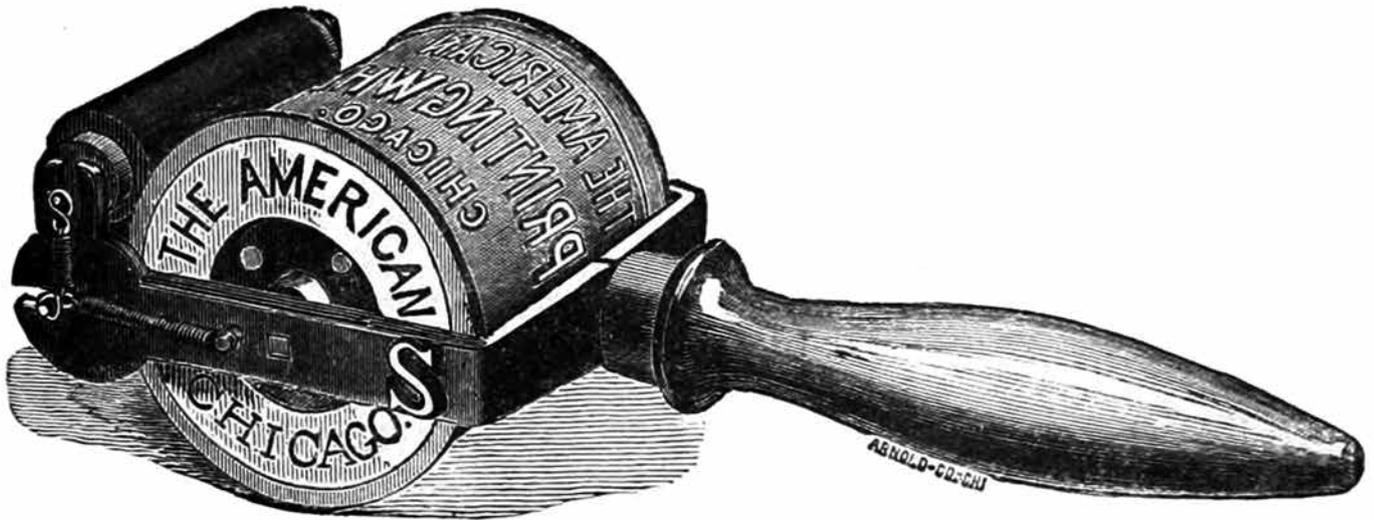
Moyen facile et sûr pour que les passants n'oublient pas les annonces

**RUBBER STAMPS.** The surface of boots and waterproof shoes soon incorporated different textures, some reproducing decorative motifs and others imitating the ruggedness of natural skins used in traditional shoes. These extruded or engraved shapes were generated directly in the molds of the manufacturing process and were also used to provide rubber soles with grooves and non-slip studs for footwear. These volumetric motifs—which sometimes included a symbol with the name of the manufacturer—left the corresponding footprint, identifying the passage of pedestrians. The soles also acted as rubber stamps, stamping their advertising message on dusty roads and wet streets.

42. Vignette published in the French humor magazine *Le Pêle Mêle*, January 29, 1905. Illustration signed by the illustrator of Spanish origin, Solar d'Alba (1876-?).

43. Advertisement for the manufacturer Albert Theilgaard of Copenhagen wearing rubber soles, reproduced in the article "Advertising on the roadway," published in the monthly magazine *The India Rubber World*, January 1, 1908.





**STEP BY STEP.**

At the beginning of the 19th century, the use of the so-called "printing wheel," rubber stamps or continuous rotation cylindrical tampon printing was already widely extended to print and mark the same message repetitively. Rubber footwear behaved in a similar fashion, repeatedly stamping the same sole design during a walk, leaving parallel and spaced footprints at regular intervals.

**44.** Illustration of the printing wheel manufactured by the Republic Rubber Co. in Youngstown, Ohio, accompanying a story published in *The India Rubber World*, September 1, 1903.

**45.** Advertisement for the manufacturer of rubber-soled shoes with the brand name ТРАРМ-Товарищество Российско-Американской резиновой мануфактуры (TRARM-Association of the Russian-American Rubber Manufactory) from St. Petersburg, published in the German satirical magazine *Lustige Blätter*, 1904.



**RIVERS OF INK.**

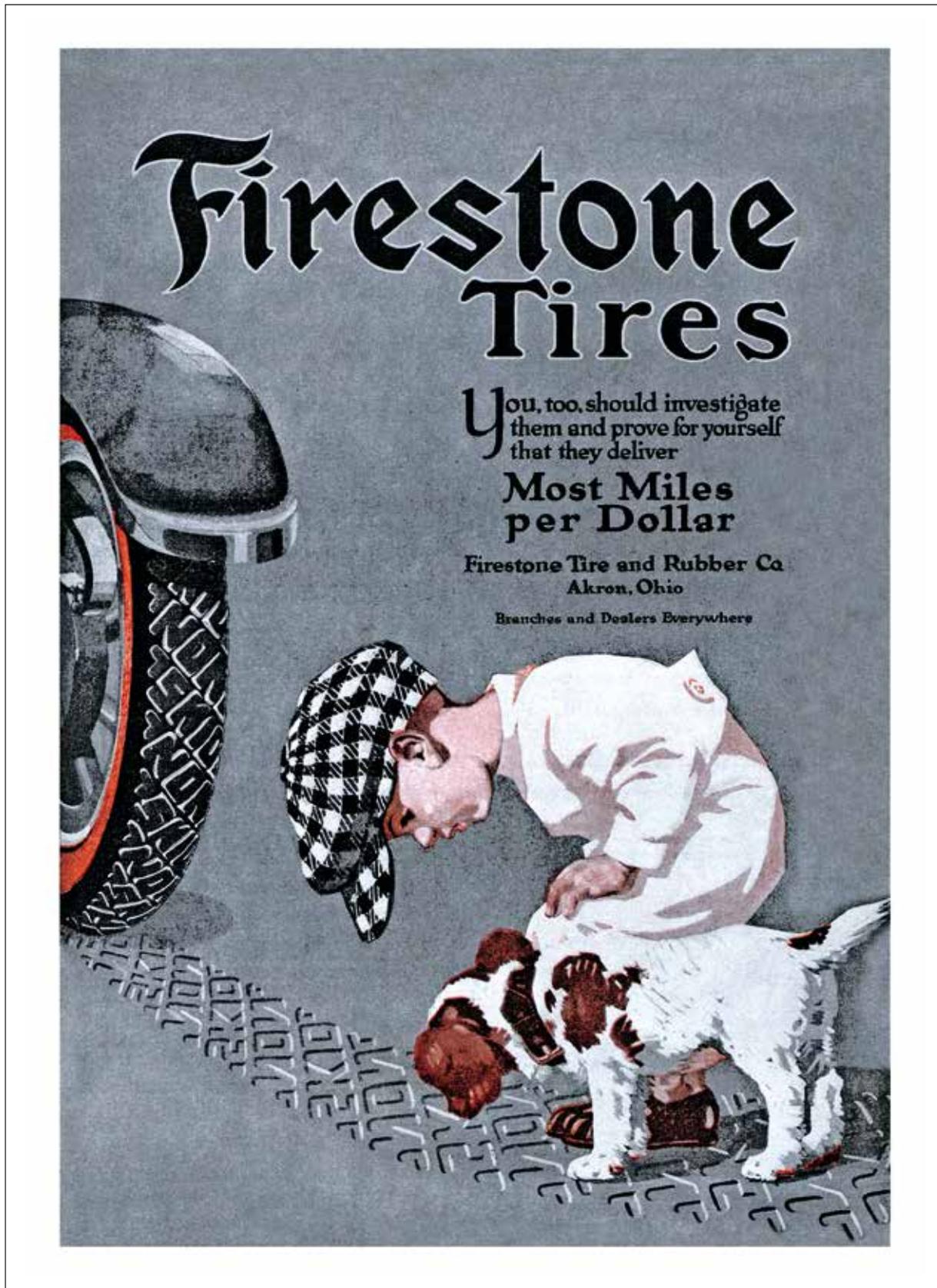
The motor world adapted the basic principle of the “bottine imprimeuse” but gave it a new element, the speed of application. Moreover, appearing as though they were dealing with movable types, messages could be composed using the different letters and signs of the alphabet, as shown in the illustration above.

**46.** Illustration showing the promotional application of the “bottine imprimeuse” in action and a detail of the rubber typographic blocks advertising the Deuxième Salon du Cycle held October 1894 at the Palais de l’Industrie in Paris.

**47.** Advertisement for Dunlop tires showing the publicity imprint of the “bottine imprimeuse” on the road, in the German magazine *Das Schnaufert*, March 15, 1902.







**TRAIL OF EVIDENCE.** The peculiar treads of Firestone NON-SKID pneumatic tires left an unmistakable typographic mark on the surface of the road. This model, with slight variations, was represented in the company catalog from 1908 to 1918.

50. Advertisement published in *The Literary Digest*, March 31, 1917.



***Composite Tire Tread  
Typifies Our Extensive  
Tire Experience!***

**WE** relieve our clients of all the detail and burden of advertising. We assume full initiative, create the basic plan, execute it in detail and work more closely with our clients (they tell us) than they had expected or thought possible.

An officer of our company will be glad to discuss your situation with you any time, anywhere.

*The*  
**Akron Advertising Agency Co.**  
SUITES 212 to 225  
*Central Savings & Trust Building*  
AKRON, OHIO  
*"Our Business is to Increase Yours"*

**TRACEABILITY.** In the above image the Akron Advertising Agency, located in the lead city for the U.S. tire industry, utilized the tracks left by distinct tire treads to explain their extensive experience as an agency in the service of many companies from the sector. The different tire tracks formed a single groove, a visual metaphor of the clarity of ideas as well as the criteria marked and oriented towards a single direction when offering solutions to advertising clients.

51. Advertisement published in *The Rubber Age and Tire News* magazine, August 25, 1920.

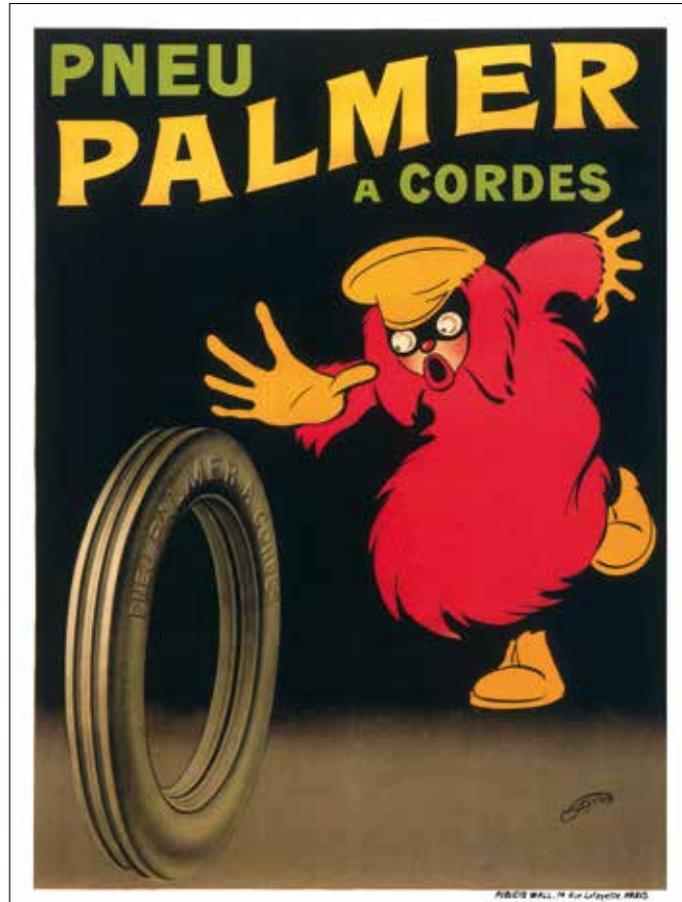


#### IMPORTED NON-SKID TIRES.

Despite Michelin's hegemony, the French market was not impervious to the emergence of foreign tire import agencies that incorporated non-skid technology in all-rubber tires with studs, notches or grooves. The competition came not only from major foreign rivals such as Continental or Dunlop, but also from smaller firms like the British Kempshall, Palmer, Rudge-Whitworth or Wood-Milne, the Italian Pirelli, the Soviet Prowodnik or the Belgian Englebert, among others.

**52.** Lithograph poster for Kempshall tires targeting the French market, c. 1908. Printed by Publicité Wall, Paris. Illustrated by Michel Liebeaux "Mich."

**53.** Palmer tire lithograph poster for the French market, c. 1914. Printed by Publicité Wall, Paris. Illustrated by V. Schusler.



Messrs. MICHELIN ET OIE. give the following guarantee with their tyres:  
*"The Michelin tyres sold by the Clipper Tyre Company are absolutely of the same  
 manufacture and quality as those sold in France by Messrs. Michelin & Co."*

# CLIPPER- MICHELIN MOTOR TYRES.

Price List and full particulars on application to  
**The Clipper Pneumatic Tyre Co., Ltd.,**  
**164, CLERKENWELL ROAD, LONDON, E.C.**

**THE SCOTTISH CONNECTION.** The imposed restrictions on the commercialization of Michelin tires were based on the validity of Bartlett patents that were controlled in the United Kingdom by Dunlop. The North British Rubber company of Edinburgh owned the rights for Scotland and granted an operating license to Michelin for the commercialization of Clincher-Michelin tires.

54. Press advertisement, May 1901. 55. Advertisement published in *The Autocar* magazine, January 31, 1903.

## IMPORTANT ANNOUNCEMENT.

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# Clincher- Michelin

**MOTOR and VEHICLE TYRES,**  
 Of same QUALITY and CONSTRUCTION as sold by  
**MICHELIN & CO. in FRANCE.**

---

SEE BRAND **"Clincher-Michelin"** NONE GENUINE  
 ON COVER WITHOUT.

---

ARE ONLY TO BE OBTAINED FROM

**The North British Rubber Co., Limited,**  
**Castle Mills, Edinburgh.**

*The warning advertisement being circulated by another Company as to Messrs. Michelin & Co. and their  
 tyres, does not apply to us or our Clincher-Michelin Tyres.  
 All buyers can order and use without risk our Clincher-Michelin Tyres purchased from us or from any  
 of our warehouses and depots.*

<b>LONDON</b> —57, Moorgate Street, E.C.	<b>WAREHOUSES.</b>	<b>EDINBURGH</b> —106, Princes Street.
<b>LONDON</b> —Maison Talbot, 97, Long Acre, W.C.		<b>LEEDS</b> —65 and 66, Briggate.
<b>MANCHESTER</b> —69 and 71, Deansgate.		<b>LIVERPOOL</b> —9, Lord Street and Commerce Court.
<b>GLASGOW</b> —68, Buchanan Street.		<b>NEWCASTLE-ON-TYNE</b> —89, Grainger Street.

<b>BIRMINGHAM</b> —77, Bath Street.	<b>DEPOTS.</b>	<b>NOTTINGHAM</b> —19, Wheelergate.
<b>COVENTRY</b> —38, Earl Street.		<b>LONDON</b> —Maison-Talbot, 95 & 97, Long Acre.
<b>WOLVERHAMPTON</b> —14, Victoria Street.		

**On View at Stand I3B, Crystal Palace.**



**TIRES THAT MAKE THEIR MARK.** In the above image, the British company North British Rubber humorously promoted their Clincher tires: "Clincher tires always leave a good impression."

56. British Promotional Postcard for North British Rubber Co. Clincher tires, c. 1920.

Le Pneu Continental ne dit jamais :  
ni où il est fabriqué, ni où est son siège social.

Comblons cette lacune :

C'est à : **Linden** nebst Hanover (Deutschland)

C'est-à-dire : **Linden** près Hanovre (Allemagne)

La Maison Dunlop s'intitule :

**C<sup>e</sup> FRANÇAISE** des Pneumatiques Dunlop  
29, Avenue de la Grande Armée, 29 — PARIS

C'est faux :

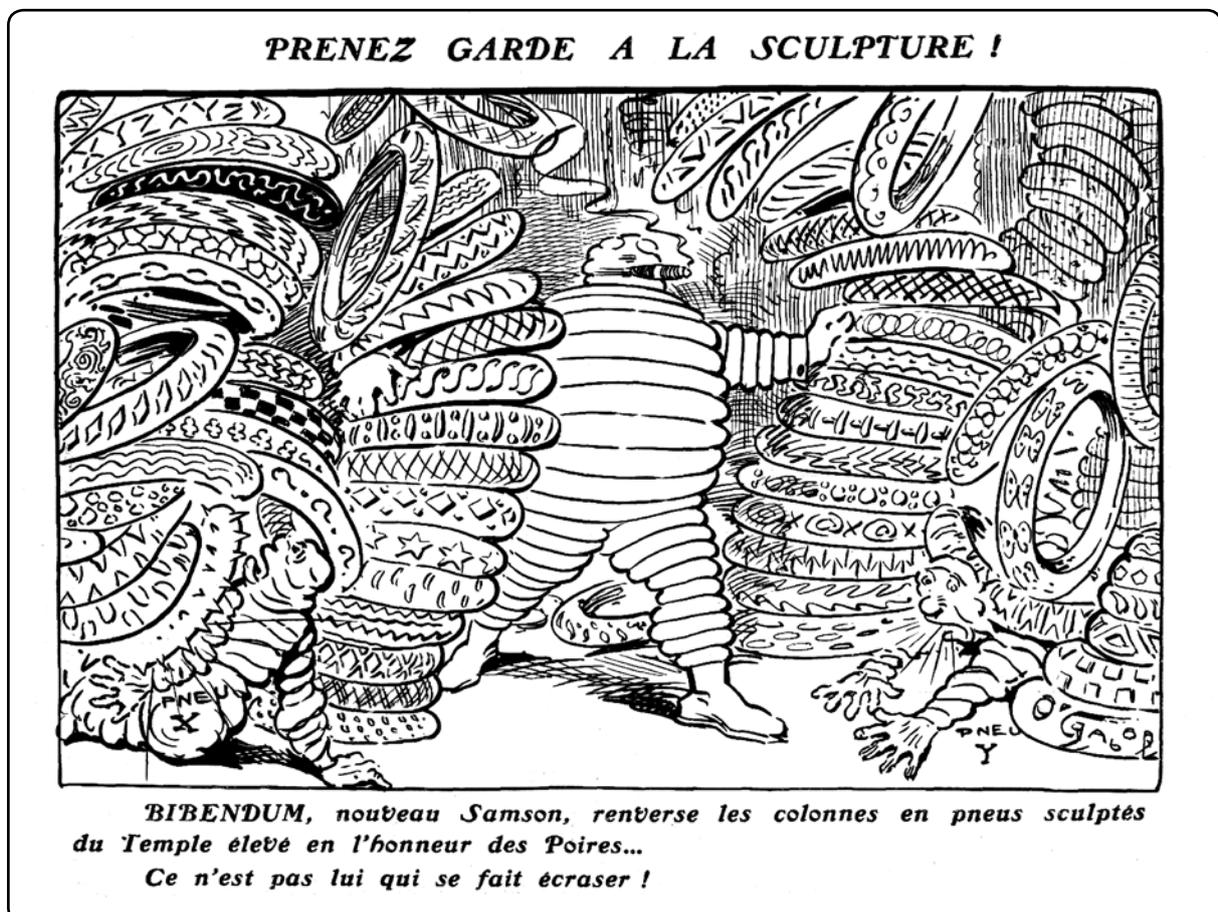
Sa raison sociale et son siège social sont :

**THE DUNLOP TYRE C<sup>o</sup> (for France) LIMITED**  
registered offices: 14, Regent Street **LONDON S. W.**

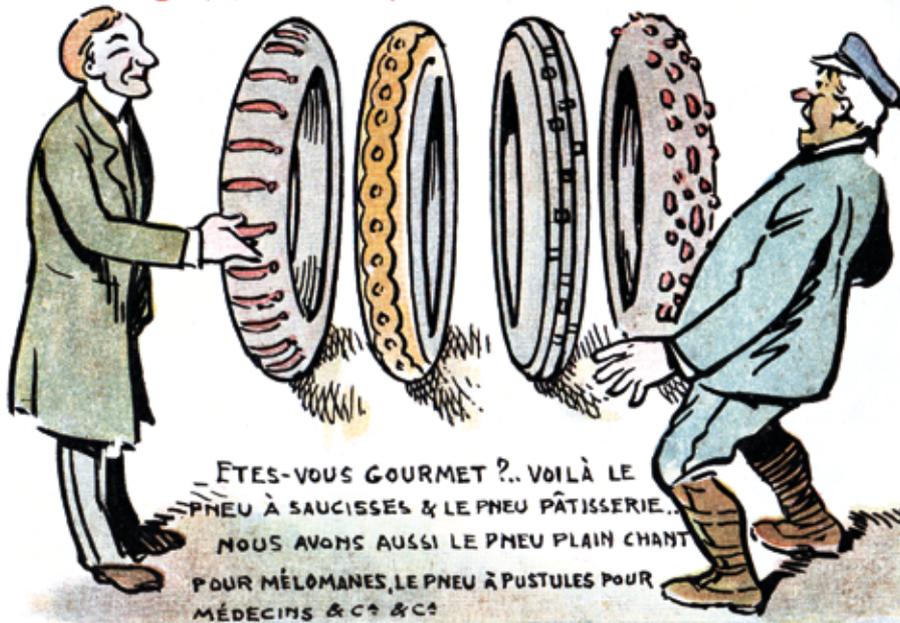
Si à l'avenir vous achetez un de ces deux Pneus, vous saurez au moins, grâce à **MICHELIN** de Clermont-Ferrand **FRANCE**, que :  
votre argent va aux **ALLEMANDS** ou aux **ANGLAIS**  
à **Linden** ou à **LONDON**

**MADE IN ... FRANCE?** The above image depicts one of the aggressive messages from Michelin's early advertisements. To a great extent it aimed to disqualify their commercial rivals, the German Continental and the British Dunlop. Appealing to patriotic sentiments, it attacked those companies that established commercial delegations in French territory. Years later, in O'Galop's illustrations, Bibendum toppled the columns formed by stacking hundreds of tires with "sculptured" treads, emulating the destruction of the Philistine temple carried out by the Herculean Samson. On the ground, competitors "Pneu X" and "Pneu Y" were crushed and buried under rubber debris.

57. Michelin leaflet, 1900. 58. Advertising postcard illustrated by O'Galop, 1909.

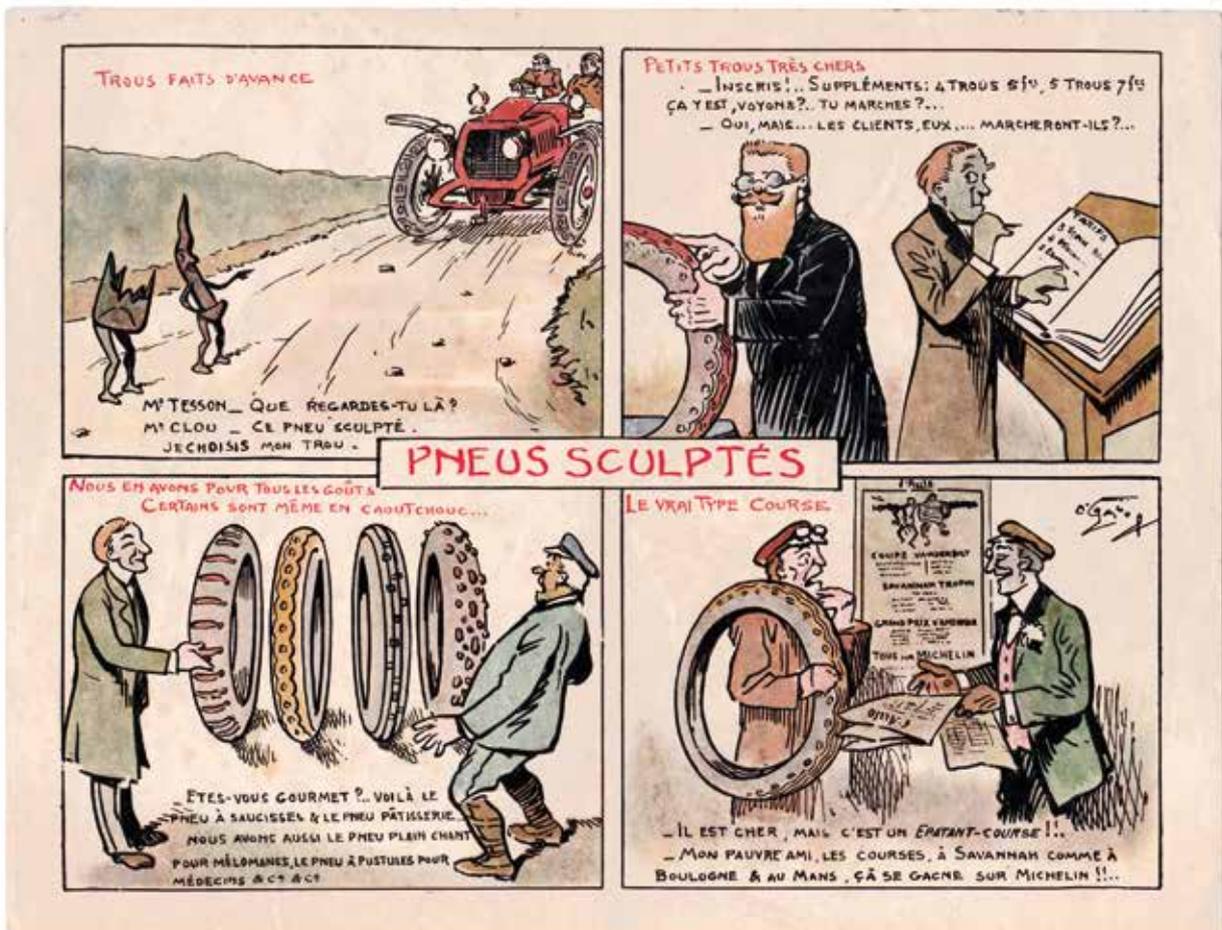


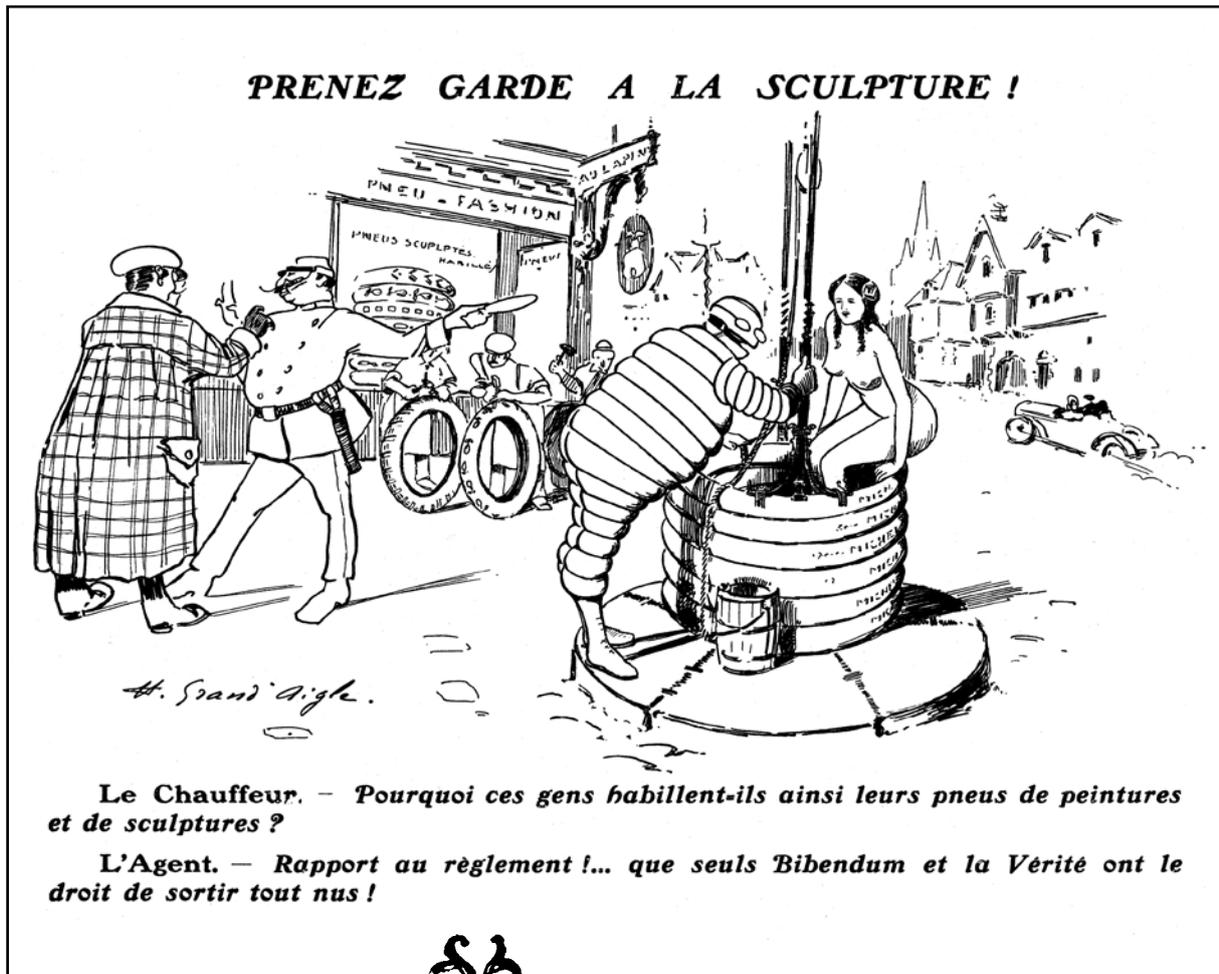
NOUS EN AVONS POUR TOUS LES GOÛTS  
CERTAINS SONT MÊME EN CAOUTCHOUC...



**CUSTOMIZED PRODUCT.** The campaign in France against non-skid rubber covers and in defense of the Semelle model counted on the caustic contribution of O'Galop. In the above vignette, the possible arbitrariness of different tread designs is satirized. The salesman shows the client some models especially created for certain professional sectors or to satisfy personal tastes: the tires with sausages and donuts for gourmets, that which incorporates a score for music lovers ... and the tread with boils for doctors.

59-60. Pamphlet and detail of one of the illustrations. Signed by O'Galop, c. 1912.





**THE NAKED TRUTH.**

The illustration of the advertisement above these lines, with the title "Beware of the Sculpture!" exemplifies the arguments put forth by Michelin in their smear campaign against "ornate" covers. In the background we see a workshop identified as Pneu Fashion in which the workers, as sculptors with carver in hand, shape bas-reliefs on the surface of pneumatic covers. In the center of the composition we see a well that, similar to Bibendum's body, is the result of stacking a series of Michelin tires and characterized by its smooth, unsculpted cover. Next to the corporate mascot, emerging from the well, appears a naked nymph. The text that accompanies the scene transcribes the dialogue that takes place between a surprised chauffeur and a policeman:

—Chauffeur: Why are these workers equipping the tires with paintings and sculptures?

—Policeman: According to the regulation only Bibendum and the Truth have the right to appear totally naked! The image on the left shows a vignette on the same theme by illustrator Édouard Louis Cousyn (E.L.C.), in a 1913 advertisement.

61. Advertisement in *Femina* magazine December 1911. Illustrated by Henri Genevrier "Grand'Aigle" (1881-1951).

62. Detail of an advertisement, number 59 of the campaign "The Theater Illustré du Pneu," published in the French magazine *L'Illustration Théâtrale*, January 18, 1913. Illustrated by Édouard Louis Cousyn (1881-1926).



**Société Française B.-F. GOODRICH**  
 221, boulevard Valmy - COLOMBES (Seine)

**L'ANNEAU DE SATURNE**  
 Les Astronomes. — Quel est donc cet anneau ?... Nous sommes dans le doute !  
 Miss Safety. — C'est simplement Goodrich, le Maître de la Route.  
 L'inséparable Pneu qui, dans l'immeuble,  
 Crée une Université par sa sécurité.

**THE TRUTH ... DRESSED UP.** In 1917 the French subsidiary of BF Goodrich began a campaign to reinforce their presence in the Gallic market, particularly incisive for the model Safety, made of a non-skid all-rubber tread. For this purpose, the character of Miss Safety was employed, a girl who in this case incarnates the figure of a demure Truth. Positioned next to the well, she illuminates the perplexed astronomers regarding Saturn's strange ring: it is a large Goodrich pneumatic tire, guarantor of universal equilibrium.

63. Full page advertisement in *L'illustration* magazine, August 4, 1917. Illustrated by Charles Putois.



#### FABLE AND TRUTH.

Grand'Aigle, like O'Galop, resorted to the knowledge of classical iconography to recreate a popular fable for Michelin advertising. The scene is a metaphor of enlightenment, knowledge and wisdom and illustrates the popular French proverb "la vérité sort du puits" [truth is found at the bottom of a well]. This originated from a sentence stated by the ancient Greek philosopher Democritus, who expressed his skepticism at the difficulty of knowing the reality at hand. Jean-Pierre Claris de Florian (1755-1794)—perhaps the most famous French writer of fables after La Fontaine—in his verses from the 1792 *La Fabule et la Vérité* described two opposing characters: the Truth, naked, austere and sincere, versus the Fable, dressed, adorned and deceitful. French academic painting in the last decades of the nineteenth century gave shape to this moralizing argument, as seen in the examples shown here. We could also add other works such as *La Vérité sortant du puit armée de son martinet pour châtier l'humanité*, by Jean-Léon Gérôme painted in 1896, *La Vérité* by Jules Lefebvre (1834-1912) in 1870, or *Spirit of the Well* by Englishman Charles West Cope (1811-1890).

In all of them the personification of truth appears, naked and devoid of adornments and artifices [lies] that cover its essence, emerging from the bottom of a dark well—the well of knowledge where fables and facts are mixed—and reflecting with its radiant mirror a reliable portrait of reality.

**64.** *La Vérité sortant du puits*, oil painting by Édouard Debat-Ponsan (1847-1913) painted in 1898. Museum of Amboise.

**65.** *La Vérité*, oil painting by Paul Baudry (1828-1886) dated around 1882, Musée d'Orsay, Paris.

**66.** *La Vérité est au fond du puits*, oil painting by Jean-Léon Gérôme (1824-1904), painted in 1895. Museum of Fine Arts of Lyon.



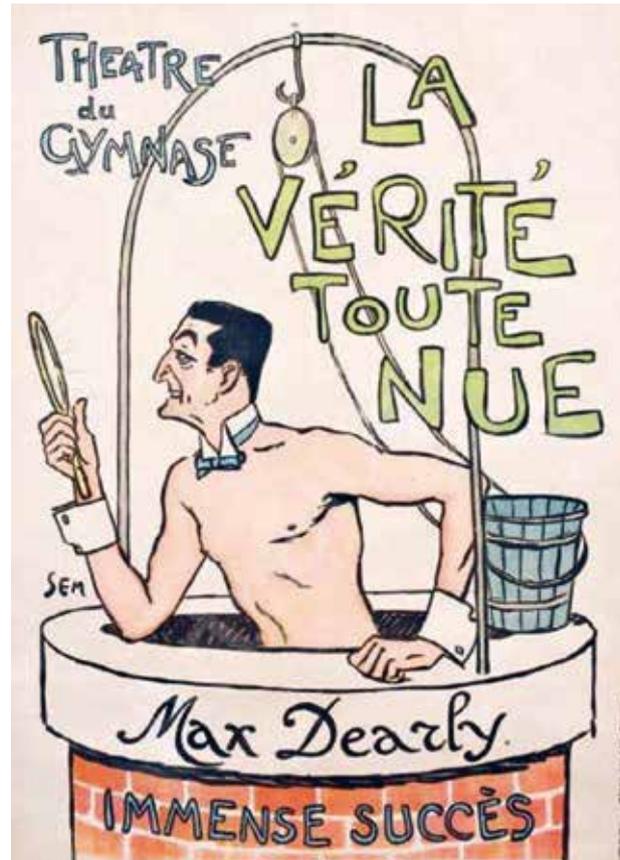
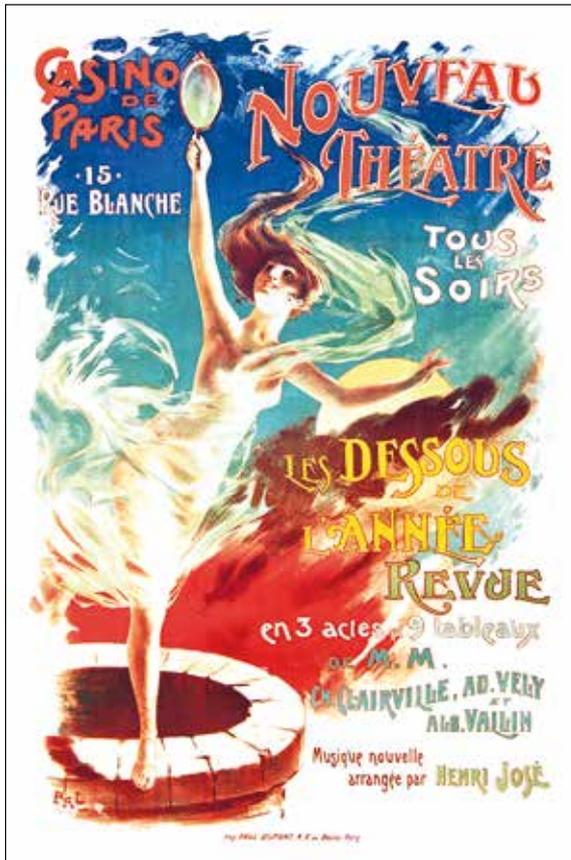


**THE TRUE BICYCLE.** The allegory of Truth was not only used for advertising by Michelin. The bicycle industry sector also employed it as can be seen in the two examples shown here. In the above image, the mirror reflects the certainty of the resounding affirmation: “Cottereau bicycles are the best.” The Établissements Cottereau were founded in 1891 on the initiative of champion cyclist Louis Cottereau, and were dedicated to the production of bicycles, motorcycles and, later in 1898 of automobiles, in their Dijon-based workshops. The image on the right depicts a poster from the Maced et Cie. advertising Vélo-Caténol, a lubricating product that, when applied to the bicycle chain, suppressed annoying creaking sounds and protected the metal from degradation. This company had its own stand in the Parisian Cinquième Salon du Cycle of 1897. In the poster you can see different accessories—chains, plates and pedals—integrated into the composition in the form of a pulley and rope to extract water from the well.

**67.** Lithograph poster, 140 x 97 cm., Imprimerie Gérin Fils, Dijon-Paris, c. 1900. Illustrated by René Préjelan (1877-1968).

**68.** Lithograph poster, 80 x 160 cm, 1897. Illustrated by the painter and sculptor Paul Decam (1853-1926).





**WELL-KNOWN TRUTHS.**

Satirical theatrical works and humorous vaudevilles were also fertile ground for allegorical figures—especially feminine and lightly clothed—such as that of the naked Truth. Above left depicts the 1896 poster of the libretto *Le Dessous de l'Année* revue, a play in three acts and nine scenes that tells the story of the corrupt mayor Lustucru, the boss of a fictional town called Feuilley-les-Oies. The image above on the right shows the poster of the play *La Vérité Toute Nue*, by Pierre Veber and Gustave Quinson, represented by the Max Dearly company during 1926 in different stages of the French capital such as the Théâtre du Gymnase or the Théâtre de Paris. On the left, a poster for the Théâtre du Rire circa 1900, located at number 12 Boulevard des Italiens, which was formerly occupied by the Théâtre Pompidou and finally, in 1903, would become the Théâtre Moderne of Paris.

**69.** Theatre lithograph poster, 82 x 126 cm., Imp P. Dupont Bouloi, Paris, 1896. Illustrated by Jean de Paleologue "Pal" (1860-1942).

**70.** Theatre lithographic poster, 1926. The illustration, a caricature of actor Max Dearly, is signed by the well-known cartoonist Georges Goursat "Sem" (1863-1934).

**71.** Theatre lithograph poster, 60 x 80 cm., Imp. Marchand, Paris. Illustrated by E. Dorda.



**LE PREMIER !..**  
**MICHELIN**  
**A INVENTÉ** le pneu vélo démontable  
**A APPLIQUÉ** le pneu aux fiocres  
**A CRÉÉ** le pneu d'automobile  
**A LANCÉ** la jante amovible  
*il vient encore d'inventer*  
**LE PNEU JUMELÉ**  
nouveau bandage industriel M.I.S.I.  
pour les **POIDS LOURDS**



## Ne payez pas Plus Cher UN PNEU

parce que sa bande de roulement est ornée de sculptures quelconques. Ne vous laissez pas prendre à ce bluff de mauvais aloi : la qualité d'un pneu dépend de l'ensemble de sa fabrication et non de son aspect extérieur.

Dans votre intérêt, imitez la Généralité des Constructeurs et des Automobilistes expérimentés, en donnant votre préférence aux

### PNEUS

# MICHELIN

dont les prix sont baissés

---

depuis le 15 Janvier 1911

**THE NEIGHBORING COUNTRY.** The francophone connection was implemented in 1911 to warn Belgian motorists about the new "sculptured" covers that were beginning to invade the market, commercialized by several of Michelin's rival firms. In addition to a price cut initiated earlier that year, the arguments put forward to convince the customer are summarized in the text printed on the advertisement: "Do not pay for a more expensive tire because its tread is decorated with all kinds of sculptures. Do not be fooled by appearances: the quality of a tire depends on the manufacturing process and not on its exterior appearance."

72. Full-page advertisement in the Belgian magazine *Revue Sportive Illustrée*, May 1911.

I Pneumatici scolpiti, tipo " Immortali ,,



**BIBENDUM.** — *Ve lo aveva ben detto che vi sarebbero costati cari! È vero però che vi fanno risparmiare una corona.*

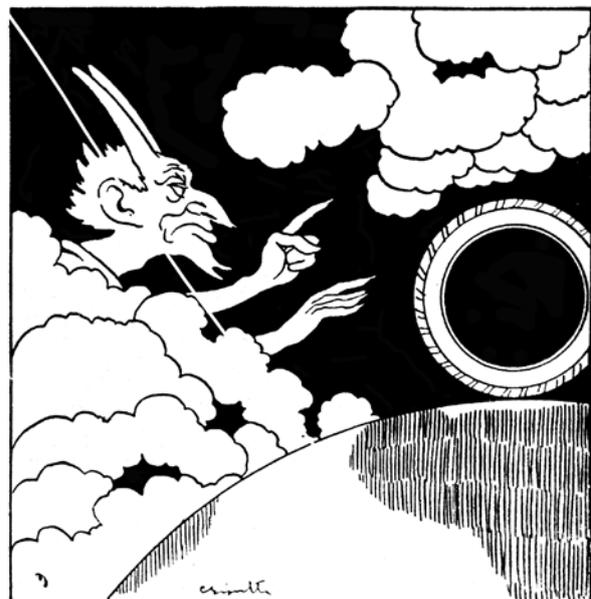
**TRANSALPINE CROSSING.** The French battle against "sculptured" tires also moved to the different neighboring markets where Michelin was also implanted. The corporate magazine *Il Pneumatico Michelin*, edited by the Italian subsidiary, was the perfect vehicle to insert all kinds of articles and illustrations that refuted in a technical or simply humorous manner the qualities of the new technology of non-skid rubber covers. In the above image, a driver dies crushed by his car after skidding on a wet road and despite having the new "supposedly" non-skid tires. The image below shows the eternal struggle between virtue and sin, good and evil: God performed a miracle by creating the virtuous Michelin double-tire model ... and the Devil, in response, placed his own curse on the face of the earth, the "sculptured" tire.

**73.** Illustration published in the Italian corporate magazine *Il Pneumatico Michelin*, October 1911. Illustrated by O'Galop.

**74.** Consecutive vignettes published in *Il Pneumatico Michelin*, March-April 1912. Illustrated by Carlo Biscaretti di Ruffia.



..... l'ottavo giorno il buo Dio creò il jumelé.....



e il diavolo, per fargli rabbia, mise al mondo lo pneu scolpito.

THE ILLUSTRATED LONDON NEWS, SEPT. 9, 1911.—423



## Bibendum on Tyre Fashions

AS A PRACTICAL MOTORIST, have you ever been struck by the extraordinary divergence of opinion which our many competitors exhibit regarding the correct design for the tread of an all-rubber cover? Look at the adjoining "pictures," taken from issues of various motor papers. It is a strange fact that most other tyre companies base their claim upon public affection because their tyres are manufactured with a special form of tread, guaranteed to perform all sorts of wonderful feats.

Why?

It would seem that they are trying to please customers much in the same way as a picture dealer who, in exhibiting a picture set in a showy frame, diverts the attention of the purchaser from the real object—the picture itself—by enlarging upon the merits of the frame.

But where does the value lie? In the painting itself or the frame?

**The very fact of such a great variety of fancy pattern tyres proves conclusively that none of these patterns is correct.** Either one pattern is the best, and should be universally adopted by every tyre manufacturer throughout the world, or all are unnecessary. The only redeeming feature I can see is that they serve as an advertising point for pushing sales; in which case we must say that the tyre manufacturer has not the interest of his clients at heart.

He ought not to say: "Now here are a few of my assorted patterns. I haven't the ghost of a notion which is the best; it is for you to make your choice." What he should say is: "I have experimented with all sorts and shapes of tyres, and this is the model I have found to be the best; consequently I do not manufacture any other design. If I did, I would be deceiving you."

If the grooves on one tread are good, then how can the ribs on another be equally good?

And what happens to all those lumps? At the outset they support the whole weight and bear the driving strain; then, after a time, disgusted with having so much work put upon them, they quickly disappear. Result? **A plain tread cover.**

Again, have you ever compared the thickness of a Michelin Square Tread with a grooved or fancy pattern cover? Measured from the bottom of the grooves there is nearly  $\frac{1}{13}$ th of an inch less substance than in our Square Tread; and, in the case of another, if we measure the tread at its thickest part, we find  $15\frac{1}{2}$  m/m. as opposed to the 18 m/m. of the Michelin Square Tread, *i.e.*,  $\frac{1}{10}$ th of an inch less substance.

You must not be surprised, then, if they last a shorter time than a Michelin Square Tread; and yet some of these tyres cost you more than you would pay for one of our Square Treads. Then, to revert to our original comparison, why pay more than the picture is worth because of the ornamental frame?

Was I not right when I said it was purely a huge piece of advertising bluff?

**MICHELIN TYRE CO., LTD.,**

81, Fulham Road, Chelsea, London, S.W.

**KALEIDOSCOPE.** The British advertisement displayed above shows a stack incorporating some of the most well-known non-skid rubber tires available in 1911, which Michelin criticizes. Counting up from the bottom we can recognize, for example, the Kempshall tire tread in third position, and Dunlop's characteristic Grooved tread in the seventh.

75. Full-page advertisement in *The Illustrated London News*, September 9, 1911.



**THE COMPETITION.** Examples of advertisements between 1910-1912 for the four major British companies offering non-skid rubber tires and with whom Michelin competed fiercely.

**76.** Advertisement for the company North British Rubber of Edinburgh with different tires in 1910 and their corporate mascot, the lion.

**77.** Wood-Milne's advertisement employing the chauffeur as a publicity character in the 1912 campaigns. *The Times*, May 24, 1912.

**78.** Advertisement for The Avon India Rubber with the models they offered and their omnipresent symbol, the megalithic portal of the Stonehenge ceremonial ensemble, located in Wiltshire County, as well as the headquarters of the British company. *The Times*, November 4, 1910.

**79.** Fragment of a 1911 advertisement for Kempshall tires.

**Your Tyres**

The original cost of Avon Tyres will save the cost of ordinary tyres time and time again. They are so painstakingly made—by the pick of British skill, in the great Avon factory at Melksham—that every single tyre sent out is a marvel of thoroughness, strength, and durability.

The quality which makes Avon Tyres go farther than any others is the vulcanization of casing and tread by one operation—instead of two, as with ordinary tyres.

Avons will go farther and give better service—and in the end will cost far less.

PRICE LIST FREE.

**THE AVON INDIA RUBBER CO., LTD.** Melksham, Wilts.  
London Depot: 35, LONG ACRE.



**THE**  
**GROOVED DUNLOP**



is an ideal tyre for sweet running on dry roads. Should rain produce greasy surfaces, a steel-studded Dunlop tyre can be substituted in a minute by means of the Dunlop detachable wheel or the Dunlop detachable rim.

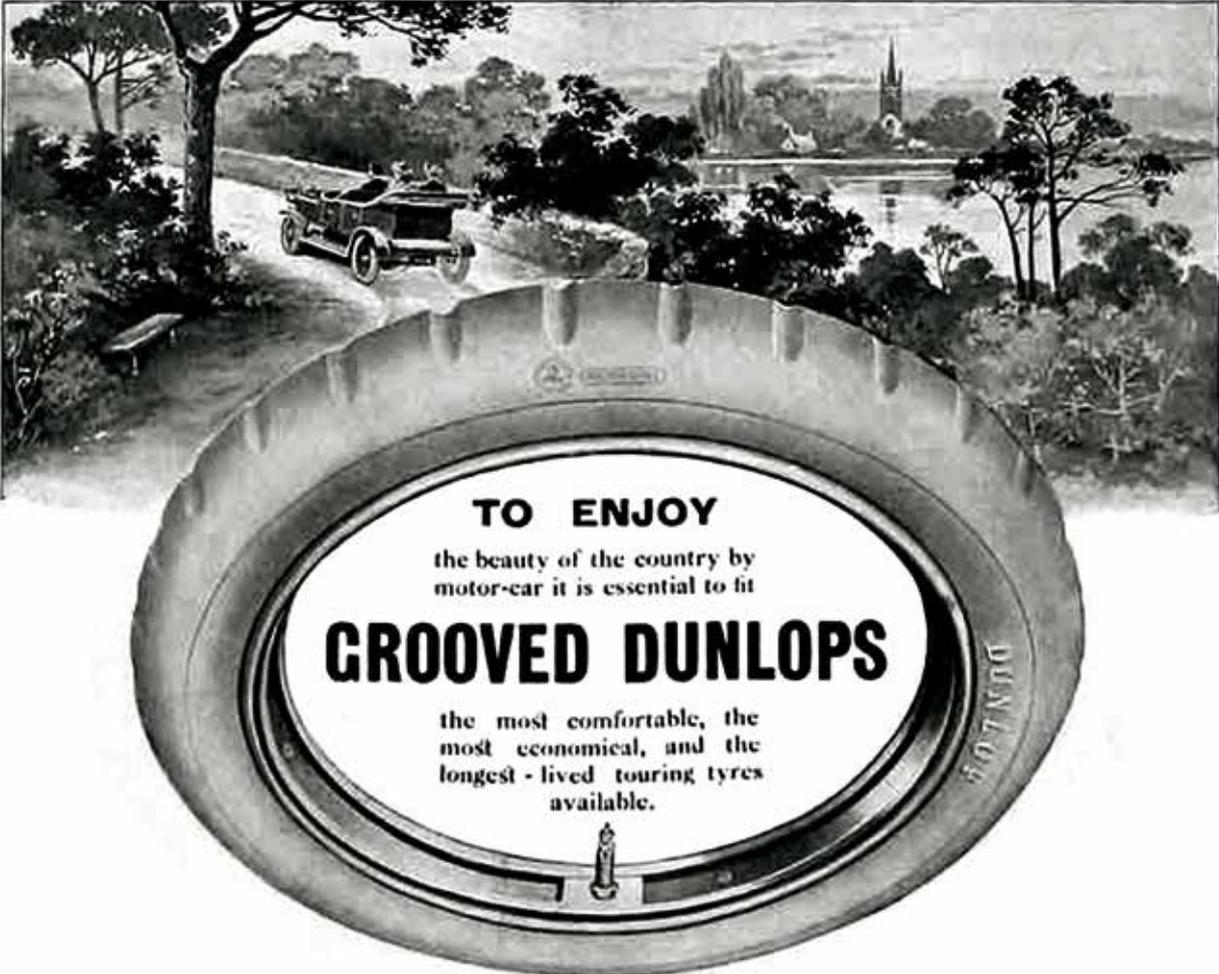
Send for particulars of Dunlop tyres, detachable wheels and rims.

The Dunlop Tyre Co., Ltd., Aston, Birmingham; and 14, Regent Street, London, S.W.

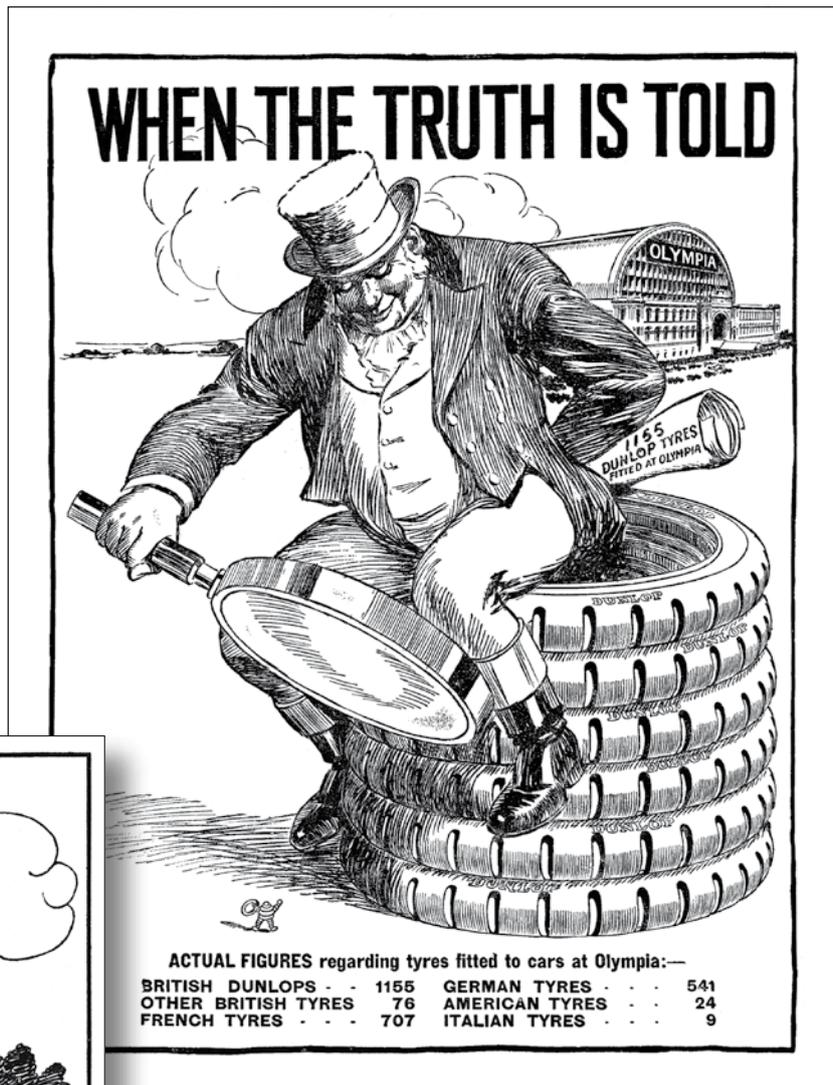
**THE ENGLISH CHANNEL.** Michelin's French tires competed mainly in Great Britain with the Grooved Tread model from Dunlop, having characteristic grooved notches in the tread.

80. Advertisement published in *The Illustrated London News*, September 10, 1910.

81. Advertisement published in *The Graphic* magazine, August 15, 1910.



**TO ENJOY**  
the beauty of the country by  
motor-car it is essential to fit  
**GROOVED DUNLOPS**  
the most comfortable, the  
most economical, and the  
longest-lived touring tyres  
available.



**E' BEN PICCOLO** il numero delle vetture che convengono al più importanti avvenimenti mondani e sportivi e di quelle che circolano per ogni dove che non siano montate sui **PNEUMATICI MICHELIN "CABLÉ,"**

**FLYWEIGHT.** Dunlop also used their advertisements to denigrate their main adversary, Michelin, as seen in the advertisement above. The scene shows the popular character representing British patriotism, John Bull, who is smiling while observing the diminutive Bibendum through a magnifying glass. The French pneumatic outsiders are no match for the locals, such as Dunlop's well-known Grooved Tread on which the gigantic British gentleman sits. This is made evident by the number of cars tire manufacturers had equipped in the 1910 edition of the Olympia Motor Show in London's West Kensington: 49% British (46% Dunlop and 3% others), 28% French, 21% German, 1% American and a token 0.3% by Italians. Years later, it was precisely the corporate magazine of Michelin's subsidiary in Italy which published an advertisement that repeats the scene, although the protagonists are reversed. Without naming their opponents, the text states: "The number of cars that participate in the most important sporting and world events and those that circulate today that are not equipped with Michelin Cablé tires is very small."

**82.** Dunlop's advertisement published in the English magazine *The Autocar*, November 26, 1910.

**83.** Michelin advertisement published in the Italian corporate magazine *Bibendum*, August-September 1922.

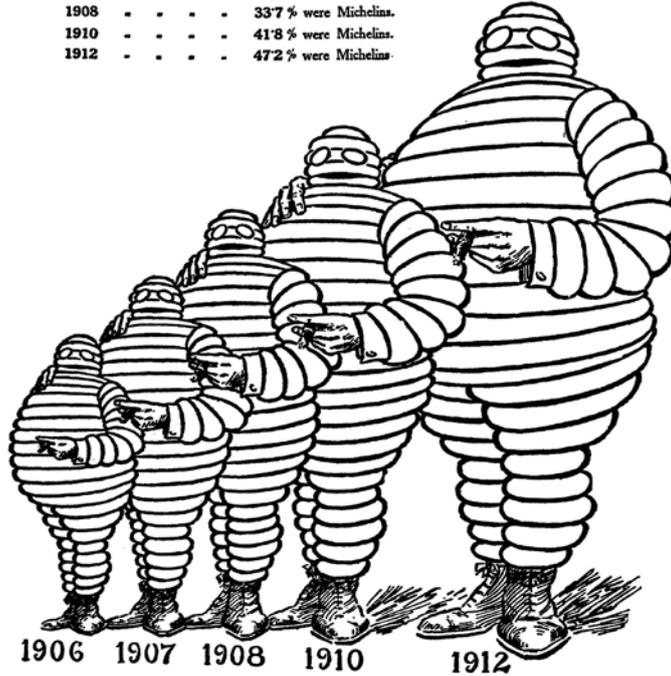
## Unceasing Growth in Popularity

OF  
**MICHELIN**

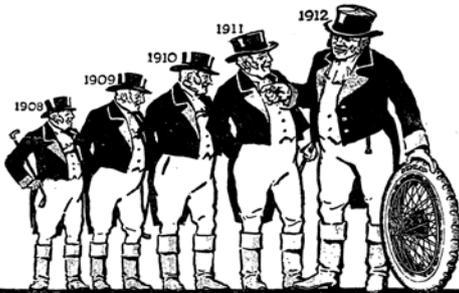
Tyres.

PARIS AND OLYMPIA MOTOR SHOWS:

1906	- - - -	24.3 % were Michelins.
1907	- - - -	25.7 % were Michelins.
1908	- - - -	33.7 % were Michelins.
1910	- - - -	41.8 % were Michelins.
1912	- . . .	47.2 % were Michelins.



The comparative position of our chief competitor is shown by the above scale. There was no Paris Show during 1909 or 1911.



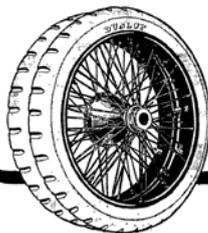
988 DUNLOPS. 1,160 between all others.	1,072 DUNLOPS. 1,341 between all others.	1,152 DUNLOPS. 1,305 between all others.	1,269 DUNLOPS. 1,341 between all others.	1,356 DUNLOPS. 875 between all others.
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### HARD FACTS

proving the steady growth in popularity of British-made

## DUNLOP TYRES

in the estimation of the British public, as evinced by the number of tyres fitted to cars at Olympia Show.



**DUNLOP EXHIBIT STAND 187 OLYMPIA.**  
(November 7 to 15, inclusive)

THE DUNLOP DETACHABLE TWIN WIRE WHEEL. Dunlop plain and grooved tyres. Dunlop leather-tread non-skid tyres. Dunlop detachable wire wheels. Dunlop detachable rims. Dunlop accessories for tyres, wheels, and sundries.

THE DUNLOP RUBBER CO. Ltd.  
15, Deansgate, MANCHESTER.

### HANDLING STATISTICS.

The struggle between Michelin and Dunlop for leadership in the British market became an endless series in which any statement or message launched in an advertisement by the rival company was answered with a new barrage of altercations ... and disparaging remarks. An example of this rivalry can be seen in the two samples on this page. In January 1913 Michelin inserted an advertisement explaining that their brand of tires equipping vehicles presented in the London Olympia Show and the Salon du Paris between the years 1906 and 1912—in 1909 and 1911 the French event was not held—had increased from an initial 24.3% to 47.2% in 1912. A few months later Dunlop replied with an advertisement to refute their competitor, employing the same resource: Michelin had displayed a bar chart in which the modules were an erect, full-length Bibendum—varying in size—according to the figures, Dunlop's chart was a growing line of repetitions of the British patriotic character John Bull.

84. Michelin advertisement published in the British newspaper *The Manchester Guardian*, January 31, 1913.

85. Dunlop's advertisement published in the British newspaper *The Manchester Guardian*, November 7, 1913.

*La superiorità dei Pneumatici*

# MICHELIN

*ingigantisce !!!!*

*Ecco le percentuali dei Pneumatici Michelin montati sulle vetture esposte ai SALONS DI PARIGI*

1906	1907	1908	1910	1912
36%	37%	50%	55%	63%

## CONTINENTAL

### TIRES and TUBES

*Canadian Distributors:*

#### MICHAEL ERT IMPORTING CO.

120 King STREET WINNIPEG

Phones  
Garry 2110  
Garry 3223

1615      4516      7500      10000 Employees

**Dall'aumento del nostro personale si capisce l'immensa diffusione dei nostri prodotti**

1615      4516      7500      12000 **Personale impiegato**

#### GROWING FIGURES.

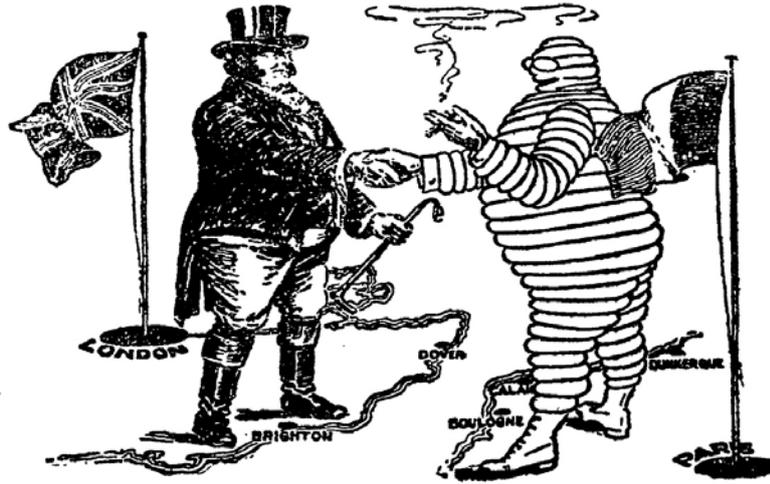
Different tire companies made use of the same graphic resource to statistically represent their superiority over the rest of their rivals in one respect or another. The British Michelin advertisement shown on the previous page regarding their presence in the Salon de Paris offers quite different figures in its Italian adaptation: 36% instead of 24.3% in 1906; 37% instead of 25.7% in 1907; 50% instead of 33.7% in 1908; 55% instead of 41.8% in 1910; 63% instead of 47.2% in 1912.

The two examples shown by Continental refer to the number of workers in their factories, going from 1,615 in 1900 to 12,000 in 1914, depicting a constant annual progression.

**86.** Michelin's advertisement in the Italian press, 1912.

**87.** Advertisement of the Continental tire import agency for Canada in the *Manitoba Free Press*, February 8, 1913.

**88.** 1914 advertisement for Continental's Italian subsidiary, Continental Società Anonima per l'Industria della Gomma, with headquarters based in Milan.



**"L'Entente Cordiale"**

**THE TWO SIDES OF JOHN BULL.** The patriotism inherent in John Bull was a quality that Michelin took advantage of to use in their commercials that claimed partnerships among allies, with the help of the mascot Bibendum who had been converted into ambassador for all of France. In the advertisement below, Dunlop resorted to John Boyd Dunlop's graphic incarnation to establish a dialogue with John Bull, lashing out at the rival French company for daring to insinuate in their advertisements that they were the inventors of the tire. Indeed, it was customary for Michelin to specify in their advertising messages that they were the inventors of the tire ... for automobiles.

89. Detail of an advertisement published in *The Manchester Guardian*, September 29, 1914.

90. "A good joke." Advertisement published in *The Manchester Guardian*, March 11, 1914.

**A GOOD JOKE!**

JOHN BULL: Have you seen the latest, Mr. Dunlop? A foreigner claiming to have invented the pneumatic tyre!

J. B. DUNLOP: Ha, ha! Well, that's good! Why, the first pneumatic tyre they ever saw was the Dunlop. Sent our men over to France to teach them how to make 'em, too. And the best of them recognise the fact.

(M. Le President de la Commission Sportive de L'Automobile Club de France, speaking at the Pneumatic Tyre Majority Celebration, said: "All of you who have been associated with the movement from its earliest stages . . . as cyclists and as motorists, can appreciate the invention placed at our disposal as the result of the genius of Dunlop. **DUNLOP WAS THE CREATOR.**")

**DUNLOP**  
FOUNDERS OF THE PNEUMATIC TYRE INDUSTRY.

**DUNLOP**  
First in 1888:  
Foremost ever since.