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From Jeanneret to Le Corbusier: Rusting Iron, Bricks and Coal and the Modern Utopia

TIM BENTON¹. In a letter to Amédée Ozenfant of 9 June 1918 Jeanneret wrote 'I have discipline in my business affairs, but neither in my heart nor in my ideas. I have let the habit of impulse thrive in me for too long'². In November he wrote to his parents, after a visit to the site for the abattoir of Challuy at Nevers, 'My life is a paradox; exhausting. By day I am an American ...[and] read Taylor and practice Taylorism'³. The implication is, of course, that he reverts in the evening to being an artist and intellectual.

The business-man/artist fascinated Jeanneret. A role model was the entrepreneur-architect Auguste Perret, the dapper art lover and patron of *Art et Liberté* whose architectural practice was underpinned by his construction work⁴. On 14 May 1919, Jeanneret wrote to Tony Garnier at Lyons expressing his admiration and promoting himself as a business-man architect on the grounds that 'I believe that an architect should be responsible both financially and technically for the works he creates'⁵.

Amédée Ozenfant too, seemed to offer Jeanneret a model of harmonious unity of business and art:

'In an office with harsh lighting, he has his American desk, his filing cabinets, his telephone, and his paint box and easel; everything is grouped around a swivel chair; and during working hours he runs the Jove couture salon, where the grand courtesans go. He paints, he writes, he reads.'⁶ (Fig. 1)

Between 1917 and 1921, Jeanneret tried to follow suit, making money, designing buildings, painting and writing – sometimes

in turn, sometimes in parallel. He even wrote to his parents, in May 1919, suggesting that he might make a fortune quickly and retire to paint full time: 'I soon hope to have all the money that is necessary to totally liberate me from the material worries of life'⁷. By 1921, this experiment had failed, disastrously. I believe that this failure, and the form it took, materially helped the butterfly of Le Corbusier to painfully emerge from the chrysalis of the thirty three year old Jeanneret.

I want to focus on the 'horror' of reality, of the point where imagination and hope hit the buffers of bankruptcy. This is the underside of capitalism, dealing in liquidated war stocks of scrap metal – barbed wire, corrugated sheet and angle irons. I want to paint a picture of a world of bailiffs, of unsecured loans, of hare-brained schemes which might make a fortune but which end in accusations of theft and fraud, of tons of goods which go missing on railroad trucks, of debts covered by loans covered by further loans and postponed, month by month until Jeanneret's businesses were passed into the hands of the receivers and he is finally released into bankruptcy.

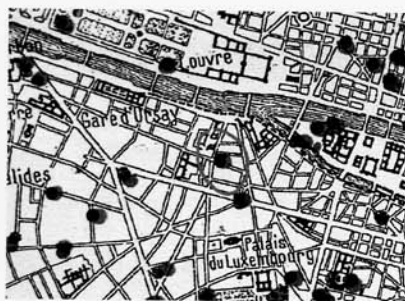
Along the way he lost money invested by his father⁸ and finished up owing money to many of his friends, whose debts obsessed him until well into 1924.

'So what?', you might ask. What, if any, is the causal relationship between Jeanneret's business dealings and the development of Le Corbusier's career as writer and architect?.

–1 A version of this paper was given at the Symposium 'Le Corbusier before Le Corbusier' held jointly by the Bard Graduate Center, the Institute of Fine Arts and the Graduate School of Architecture, Columbia University on 24-25 January 2003. I was able to work it up further as a seminar paper in the Biography working group at the Getty Research Institute, on February 10. I am grateful to Andrew Morrall, Professor Jean-Louis Cohen and Professor Mary MacLeod for the invitation to the first event, and to Professor Tom Crow and Charles Salas of the Getty Research Institute for a visiting scholarship which allowed me to complete this work rapidly. –2 Cited in Françoise Ducros, 'Amédée Ozenfant "Purist brother": an essay on his contribution', in Carol S Eliel, *L'Esprit Nouveau Purism in Paris 1918-1925*, LACMA, Los Angeles 2001, p. 76. –3 Letter to parents, 22 November 1917, cited by H. Allen Brooks, *Le Corbusier's Formative Years*, Univ. of Chicago Press, Chicago 1997, p. 486 (Brooks's translation). –4 G. Fanelli and R. Gargiani, *Perret e Le Corbusier confronti*, Laterza, Bari 1990, p. 79-82. –5 '... j'ai estimé qu'un architecte devait pouvoir se porter responsable financièrement, techniquement des œuvres qu'il conçoit' (FLC E2-03 54), cited in J. Jenjer, *Le Corbusier Choix de lettres*, Birkhäuser, Basel 2002, pp. 150-2. –6 Jeanneret to William Ritter, March 1918, see Ducros in Carol S Eliel, *op. cit.* p. 76 n. 16. Interestingly, when Ozenfant later opened up a fashion boutique called 'Les robes d'Amédée' in 1924, Le Corbusier criticised him for being 'dilettante' (Ducros, *op. cit.*, p. 95). –7 Jeanneret to parents, 19 May 1919 (Brooks, *op. cit.*, p. 501). –8 His father gave him a loan of 6,000 Swiss frs on 25 March 1920 (FLC G1-02 92), which Jeanneret needed to pay back a loan to E. L. Bornand, the director of SABA (27 September 1917), which Jeanneret had borrowed to set up the brick factory at Alfortville. Jeanneret agreed to pay his father 10% on 7,500 frs which he had placed into an account, while awaiting a settlement of Jeanneret's court cases against Anatole Schwob (a claim for 19,275.85 frs) and Alfred Riva (in the Scala Cinema affair). In the end, Jeanneret settled out of court with Schwob for 6,485 frs on 15 June 1920 (FLC G1-02 216), not 3,485 as Brooks maintains (p. 429) but, by October 1920, he had neither repaid his father nor paid him any interest. When prompted, he grudgingly handed over 500 frs (196 Swiss francs) representing 5% interest from 1 April to 30 October and threw in a free subscription to *L'Esprit Nouveau* (Jeanneret to father, 29 October 1920 (FLC G1-02 569)). –9 Although Jeanneret and Ozenfant registered the title for a new series entitled *Commentaires sur l'Art et la Vie Moderne* on 14 November 1918 (FLC B2-13 337) and announced in its first volume *Après le Cubisme* a series of further publications, including *Vers une Architecture* ('already at the printers'), it is almost certain that the articles for *L'Esprit Nouveau*



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1. Advertisement for 'Jove' published in *L'Esprit Nouveau* 11
2. Plan of shells from Big Bertha in the Spring of 1918 *L'illustration*, 4 January 1919, detail showing the shell on the rue Jacob

These are the months, from July 1920 – December 1921 (that is up to *L'Esprit Nouveau* 13) in which Jeanneret became Le Corbusier and wrote the articles which, when published as *Vers une Architecture*, constituted the most influential book on architecture of the twentieth century⁹. This is the moment of Citrohan I, of the publication of Dom-Ino and the 1919 housing schemes with their full Modernist potential exposed. These are the articles which critique European architecture by the yardstick of American rationalism and industrialisation.

The author of the white utopia of *Vers une architecture* was a man whose hands were black from pressing briquettes from coal and coke dust. The man who advocated industrialisation was a man who knew that industrialisation did not necessarily work. I see this, not as Allen Brooks does, as a simple passage between an unsuccessful episode of business into a return to art and architecture, but as a cathartic rite of passage into the 'happy schizophrenia' of Le Corbusier's most creative period.

I do not hold, as some do, that art is necessarily demeaned if its autonomy is impugned by association with life. Nor am I prepared to reduce the aesthetic to an illusion of the rational mind. But there is no necessary causal connection between life and art. If life does affect art, perhaps fear of death would be a good test case. Jeanneret was in Paris during the aerial bombardment of Paris in 1918, including the attentions of the Gotha bombers and the random shelling of the Big Berthas. He wrote to his mother:

'I repeat, there is in my character no sense of personal danger of any kind, business included; I would make an excellent soldier. I have no fear of death, either my own or that of others.'¹⁰

On 17 February, Jeanneret wrote to his parents claiming that he had nearly been killed by a bomb near his office and another near his apartment¹¹. In fact, a shell from Big Bertha did in fact land in the rue Jacob, and many others in the streets he frequented (Fig 2). But there is no reason to doubt his own insouciant approach to these alarms and excursions, nor to look for effects in his art. It is not this kind of biographical detail which interests me.

More interesting is the relationship between the image of industry and engineering (a staple of Le Corbusier's epiphany of modernism) and Jeanneret's experience of participating in it. Before looking at the latter, I will make a case for taking seriously this relationship. We probably all agree, especially after the work of Stanislaus von Moos¹² and Beatriz Colomina, that one of the key achievements of Le Corbusier-Saunier's articles in *L'Esprit Nouveau* was the metaphoric use of images.

That is, that the message, while purporting to show the reforming impact of cold reason and American engineering on an outworn formal language of architecture, actually promoted a new visual language stripped of its brutal context. Far from advocating contingency, these are images of physical and spiritual liberation.

Images of aeroplanes juxtaposed with discussion of the

(later published as *Vers une Architecture*) were not written until the summer of 1920. For example, his description to William Ritter of the second issue of the *Commentaires* gave it the title 'L'architecture est-elle de cette époque ? ou quelque chose d'analogue avec un interview de Loucheur ou de Citroën' (Letter to Ritter, 1 October 1918, Jenjer, *op. cit.*, p. 146). In a letter to his parents of 9 January 1919 he called the book *Vers une Architecture* 'qui sera une chose d'avant-garde' (Jenjer, *op. cit.*, p. 148) but there is no evidence that he really worked on the articles until he began to collect the visual materials in the spring and summer of 1920. On the vexed subject of the authorship of the 'Le Corbusier-Saunier' articles, and the first edition of *Vers une Architecture*, I agree with Paul Turner that it is likely that Jeanneret wrote the articles on his own, but that he was greatly stimulated by Ozenfant in the collection and use of photographs of cars, aeroplanes and other symbols of modernity which Ozenfant had already mastered in his magazine *L'Élan* and in his theoretical approach to the Zeitgeist and to Purism. Ozenfant himself only claimed that the period of *Après le Cubisme* was 'truly collective' (attributing to himself the theory element – 'physiological art, mechanical selection'). He claimed that his role in *L'Esprit Nouveau* was as 'the inventor, the diplomat, the editor and the technician' but accepted Jeanneret's role as provider of 'excellent ideas, a financial sense... and major articles' (Ozenfant to Jeanneret, 13 August 1924, cited in Ducros, *op. cit.*, p.85). Françoise Ducros is convinced by Ozenfant's statement that some of the photographs of grain silos published in *L'Esprit Nouveau* 1 came from him (Ducros, *op. cit.*, p. 84). As early as 7 February 1922 Jeanneret referred to the architectural articles in *L'Esprit Nouveau* as being 'sous mon pseudonyme Le Corbusier-Saunier' (letter to M. Rivière, offering issue 13 with his article on 'Maisons en série' (FLC E2-20 373) I will however refer to the author of these articles as 'Le Corbusier-Saunier'. –10 Je le répète il y a chez moi l'inconscience du danger delà dans tout, dans les affaires aussi; je ferais un fort bon trouper. La mort ne m'effraye pas, la mienne ou celle des autres'. Jeanneret to his parents, 16 March 1918, cited by Brooks, *op.cit.*, p. 493. Francesco Passanti pointed out to me that Jeanneret took pride in the epithet 'casse-cou' attributed to him by William Ritter in 1911 and Du Bois in 1919. –11 'Or donc les gothas auraient pu me supprimer tout aussi bien que la foule qui ce soir fatal avait tiré le mauvais numéro' (Jeanneret to parents, 17 February 1918) –12 S. von Moos, *L'Esprit Nouveau Le Corbusier et l'Industrie*, Berlin and Zürich 1987; B. Colomina, *L'Esprit Nouveau architecture and publicity*, 1987, and 'Le Corbusier and Photography', *Assemblage* 6-23, 1987, and *Privacy and publicity: modern architecture as mass media*, Cambridge Mass, 1994.



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3. 'Des Yeux qui ne voient pas: II Les avions', *L'Esprit Nouveau* 9 final page
4. Des Yeux qui ne voient pas... II Les Avions, *L'Esprit Nouveau* 9, title page of article
5. Esthétique de l'Ingénieur: Maisons en Série, *L'Esprit Nouveau*, 13, December 1921
6. Trois Rappels à MM les Architectes. Les villes-tours, *L'Esprit Nouveau* 4
7. Briqueterie d'Alfortville, photo

Loucheur/Bonnefoy housing bill work both as symbols of modernity and as an icon of release, escape into the clouds.

This image (Fig. 3) of a Farman Goliath bomber, under the signature of 'Le Corbusier-Saugnier', is preceded by the words: 'Intelligent man, cool and calm has acquired wings. We need men who are intelligent, cool and calm to build the house and lay out the city'¹³. The Apollonian man-bird may be intelligent, cool and calm, but his Futurist imagination soars as he leaves the ground. And below it one reads: 'Messers Loucheur and Bonnevey have put forward a bill with the aim of building, in ten years, from 1921 to 1930, 500,000 low-cost and hygienic dwellings... To carry out the Loucheur programme we will have to totally change the common practices of the architectural establishment, sieve the past and all its memories through the mesh of reason and define the problem like the aircraft engineers did, in order to build machines for living in by mass production'¹⁴. But to 'define the problem' like the engineers is not simply to solve the problem of how to manufacture the 'machines à habiter' but how to fly away from the bothersome detail of cheap, working class housing.

The frontispiece to the article illustrates a by then out-dated (but beautiful) rear-engined Farman bomber flying over the trenches (Fig. 4).

Here we read: 'Noone today denies the aesthetic which emerges from the creations of modern industry' ('Nul ne nie aujourd'hui l'esthétique qui se dégage des créations de l'industrie moderne'); 'The aesthetic which emerges from the conditions of modern industry', but also 'the aesthetic which escapes....! Le Corbusier-Saugnier goes on to assert that many machines, in their proportions, play of volumes and materials are 'truly works

of art' ('de véritables œuvres d'art'). The passage from the mechanical to the artistic has been achieved. The marriage of 'raison froide' and the imagination – 'the same spirit which built the Parthenon' - is emphasised by the cropping of the images.

The reproduction contrasts smooth and angular, technical and poetic; it places the viewer in the cockpit, ready for take-off. The struts could be pilotis, the wing a reinforced concrete slab, framing the view of the future. The image is a machine for stimulating the architectural imagination.

One key image is used twice in the *L'Esprit Nouveau* articles. In the article in *L'Esprit Nouveau* 13 (December 1921) which drew together the whole of Le Corbusier-Saugnier's argument and launched his own housing schemes, including Citrohan I, we find a curious image (Fig. 5).

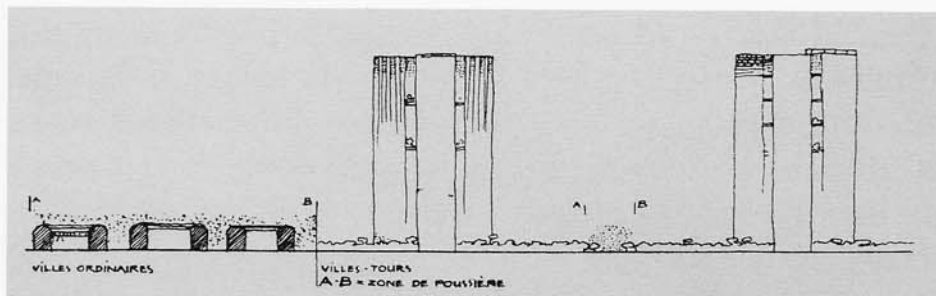
Six months before, in 'Des yeux qui ne voient pas III Les Autos' (*L'Esprit Nouveau* 10, c. July 1921) the same image, subtitled 'Bellanger. Conduite intérieure' had illustrated an ambitious definition of architecture as high art which turned on two propositions:

'In a nation of high culture, art finds its expression in the real work of art, concentrated and stripped of every utilitarian purpose: the painting, the book and music.'¹⁵

Art was therefore 'superfluous' but necessary for a country of high culture. But, while peasants loved ornament and painted frescoes, intellectuals wore English suits and owned easel paintings and books. So:

'Decoration is the necessary superfluity needed by the peasant and proportion is the necessary superfluity needed by the man of culture.'¹⁶

-13 'L'homme intelligent, froid et calme a acquis des ailes. On demande des hommes intelligents, froids et calmes, pour bâtir la maison, pour tracer la ville', *L'Esprit Nouveau* 9, published June 1921. -14 'MM. Loucheur et Bonnevey ont déposé une loi ayant pour objet la construction, pendant 10 années, 1921 à 1930, de 500,000 logements économiques et salubres... Pour réaliser le programme Loucheur, il faut donc transformer totalement les usages en honneur chez MM les architectes, tamiser le passé et tous ses souvenirs à travers les mailles de la raison, poser le problème comme se le sont posé les ingénieurs de l'aviation et construire en série les machines à habiter' (*Ibid*). The Loucheur-Bonnefoy legislation, based on the Loi Ribot (1908), made almost no impact until the necessary funds were released in July 1928 with the passing into law of the Loi Loucheur -15 'L'art, dans un pays de haute culture, trouve son moyen d'expression dans l'oeuvre d'art véritable, concentrée et débarrassée de toutes fins utilitaires, le tableau, le livre, la musique' *L'Esprit Nouveau* 9, June 1921. -16 'Le décor est le superflu nécessaire, quantum du paysan, et la proportion est le superflu nécessaire, quantum de l'homme cultivé' (*Ibid*). -17 I am grateful to Francesco Passanti for reminding me of this, see F. Passanti, 'The Skyscrapers of the Ville Contemporaine', *Assemblage* 4, 1987, pp. 52-65. Perret's towers (in 1920), too, would have been 60 storeys and Jeanneret and Perret had discussed Perret's ideas for a city of 20 storey towers in 1915 (note dated 9 August, 1915 (FLC B2-20106), following an article by Perret's nephew Sébastien Voiron in *Montjoie!* (II, April-June 1914, n. 4 / 5 / 6, p. 13). See also G. Fanelli and R. Gargiani, *op. cit.*, p. 44. -18 Most of the 2,000 odd documents in the Boxes marked 'Briqueterie d'Alfortville' at the Fondation Le Corbusier turn out to deal only tan-



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The illustration of the car with the hand-built Bellanger coachwork illustrates this thesis as follows. The coachwork is obviously 'superfluous' (and therefore eligible to be an art work) and its perfection of form appeals to the intellectual's need for proportion. The picture underscores the claim that automobiles can aspire to the condition of art, through perfection of the 'standard', like the Parthenon. Three issues later (No 13), the same image has become a metaphor of the 'machine à habiter', sandwiched between the words 'Esthétique de l'Ingénieur' and 'Maisons en Série' and heading off another discussion of the Loucheur-Bonnevay housing bill. Now the slim verticals of the coachwork represent pilotis, the windows hint at the 'fenêtre en longueur' and the wooden roof represents a reinforced concrete slab. The automobile engineers provided Le Corbusier-Saugnier with symbolic images from which, first an 'Architectural' and then a mass housing, reading could be peeled away.

Or, in a more literal vein, the 'villes-tours' in *L'Esprit Nouveau* 4 (January 1921), stimulated by Auguste Perret's interview in *L'Intransigeant* 25 November 1920¹⁷, are illustrated to contrast 'la poussière, les puanteurs et le bruit étouffant des villes actuelles' with 'l'air salubre' of the 60 floor towers proposed by Le Corbusier (Fig. 6).

The towers escape not only from the dust and noise of the street but also from the hubbub of exchange, of profit and loss, of promise of fortune and horrors of debt.

Just as Le Corbusier-Saugnier peeled away the superfluous aesthetic from the functional products of industry, I'm going to suggest that it was only when Jeanneret had fully experienced and then dumped the horrors of business dealings, with their

inexorable laws of cause and effect, that he could himself finally escape into a new world of the imagination.

THE BRIQUETERIE D'ALFORTVILLE

I am not going to give you a history of the Briqueterie d'Alfortville. I propose to focus only on its death-throes, from 1920-1921¹⁸. Neither am I going to discuss Jeanneret's scheme to manufacture the Swiss asbestos product Everite in France¹⁹ nor his involvement with the Compagnie Industrielle du Froid²⁰. I'm going to pick out two micro-histories from Jeanneret's business dealings, and then summarise the final collapse of his affairs, against the chronology of the first issues of *L'Esprit Nouveau*.

From the tantalising glimpses offered us in Brooks's *Le Corbusier's formative years*²¹, it would seem that the Briqueterie was in production in December 1917 and already in full flow that year, to the point of accumulating 4 million blocks by September 1918 with a debt of 100,000 frs (Fig 7)²².

It's certainly true that remnants of this initial debt, of September 1918, to friends like Daniel Niestlé and Sigismond Marcel, were still being paid off in 1920 (partly out of subscriptions to *L'Esprit Nouveau* which Jeanneret may or may not have repaid)²³. According to Francesco Passanti, Jeanneret himself invested around 5,000 frs in Alfortville, some Swiss friends invested a bit more and Max du Bois provided the site and the raw materials. Some time after August 1918, a new investor (probably Sigismond Marcel) was found to substantially expand the plant. Jeanneret owned the plant until it was incorporated into SEIE in the week of 7 January 1919, at which point

gentially with the brick factory and cover the years 1919-21. I have not got to the bottom of the accounts, partly because I have not yet had access to Le Corbusier's personal accounts, which are currently barred to researchers at the Fondation Le Corbusier. —19 In August 1918 he became administrateur délégué of a company to manufacture Eternit (the French name for Everite), based on French patents he had applied for. See Brooks, *op. cit.*, p. 490. —20 This company was set up around May 1918 with Louis Berthier, with whom Jeanneret had made a number of competition entries for Abattoirs and Refrigeration plants (For Jeanneret's abattoir designs, see Brooks, *op. cit.*, pp. 486-9). The aim was not only to compete for lucrative American contracts for Refrigeration plants but also to set up a food distribution system using cold storage vehicles. SABA was an investor in the company. Jeanneret may have received a salary for the work for the CIF, but he also invested 5,000 frs between July 1918 and August 1919 (FLC R3-04 201) to establish his stake in the company. —21 As Allen Brooks makes clear, with the benefit of an interview with Max Du Bois, the brick factory was set up to use the waste product from Du Bois's nearby electrical generating plant. Brooks, *op. cit.* p. 490. —22 Francesco Passanti has established that this first debt consisted essentially of two loans, to E.L. Bornand (6,000 Swiss frs rising to 17,500 frs in 1920 from accrued interest) and a later one of 25,000 frs to Sigismond Marcel. —23 For example, on 5 January 1920, Jeanneret wrote to Sigismond Marcel about paying off his debt; of the 20,000 frs he has paid back, 7,500 frs consisted of Marcel's first three subscriptions to *L'Esprit Nouveau*, and Jeanneret would also pay the last one of 2,500 when it became due (FLC E2-14 507).



8. The floods in Paris in January 1920; Courbevoie under water (*L'illustration*, 10 January 1920)

Jeanneret was awarded 100 (out of 500) shares in the new company²⁴.

The factory produced 'plots' in two sizes (50 x 25 x 15 cm and 40 x 20 x 20 cm) and bricks (6 x 11 x 22 cm), using Swiss machines to compress the cinders and cement mixture. The output during 1918 was modest, until September 1918 when, with the help of a mysterious financier (probably Sigismond Marcel) Jeanneret purchased a new machine for 70,000 frs capable of making 20,000 bricks a day. On 17 February 1918 Jeanneret wrote to his parents: 'Alfortville takes up a great deal of time. This enterprise might become profitable and even generous if the 'ifs' remain 'ifs' or at least are not carried out too painfully²⁵. In February 1918 he was still supplying small trial orders of 'plots' to SABA building sites²⁶ and on 18 February he proposed an agreement with SABA to provide them with 70% of his output, at rock-bottom prices, until their orders had been satisfied²⁷. It would be surprising if large quantities of the cinder blocks had been sold by that date, since he still feels the need to argue for the value of the expensive blocks of 40/20/20 on the grounds of speed of execution (36 m² of wall per day compared to 6-8 m² of wall using bricks)²⁸. It seems that on 18 April 1918, Jeanneret sold his entire stock of bricks and was able to pay off some of his debts and buy new machines²⁹.

But Alfortville was clearly not making much money. Up to the summer of 1920, stocks were increasing faster than sales. The high cost and perhaps the porosity of the 'plots' meant that, by 1920, the emphasis was on the smaller bricks and on a new line of 'Tandem' cement roofing tiles (covering 11 to the m²). The Tandem tiles give us a clear insight into Jeanneret's business ac-

men. These tiles too were considered too expensive and Jeanneret blamed Dobler, the manufacturer of the five machines he had bought, apparently for 4,000 frs³⁰. By 14 September 1920, his workers had only reached a production of 160 tiles per 10 hour working day per machine, compared to the 225-50 as promised, which meant that even with five machines they could only manufacture 750-800 tiles per day³¹. To date, they had only made one sale, of 10,000 tiles. According to Jeanneret, their costs were between 750 and 800 frs per thousand (over half of which was the raw materials) and yet they couldn't sell them at 800 frs at the factory, or 840 frs at the railhead³². Perhaps the only large sale of these tiles was 12,000 for the roof of a cinema by the architect Andriot at 55 Ave Bosquet in Paris, since this was the sale mentioned in several letters as a reference³³. He sold 3,500 tiles for 3,922 frs to his friend Paul See in December 1920³⁴ and offloaded a truck of 3,000 tiles to Desjardins on the basis of commissioned sales. Desjardins was to charge 875 frs per thousand and take a commission of 25 frs/1,000³⁵. It is not clear how many were sold or at what prices. By July 1921, Jeanneret was offering the Tandem tiles at 625 frs/1,000 and by October 600 frs/1,000³⁶. On 21 June 1922, Jeanneret tried to sell some tiles to the architect Vergne at half-price (400 frs/1,000)³⁷.

In January 1919 and again in 1920 the brick works was flooded, though it is not clear how much was actually lost (Fig. 8)³⁸. From the records I have seen, it is only in the autumn of 1920 that the Briqueterie starts to sell bricks and tiles in any quantity, and by then it was too late³⁹. In June 1920 Jeanneret had taken an order for 70,000 bricks of which 60,000 at least had been delivered by

²⁴ Francesco Passanti explains this as being in virtue of some sales and the stock of bricks he had managed to accumulate during this time, plus his initial investment of 5,000 frs. Passanti identifies the main investors in SEIE (including Alfortville) as Marcel (70,000 frs) and E.L. Bornand and others (30,000 frs). ²⁵ Alfortville me prend un temps considérable. Cette entreprise deviendra intéressante et généreuse, si les "si" demeurent des "si" ou ne se réalisent point trop méchamment. (17 February 1918, Jenjer, *op. cit.*, p. 138). In the same letter Jeanneret writes of his worries about the frost which threatens the 1,500 francs' worth of 'plots' manufactured in the last three days. ²⁶ For example, on 16 February 1918, 600 plots each for the Usine Blum (FLC R3-04 192), Usine Blériot (FLC R3-04 191) both at Suresnes and the chantier R. Brochot at Gargan (FLC R3-04 193) and 1,000 plots for the Usine de Dion-Bouton at Puteaux (FLC R3-04 190). These are clearly sample orders, and do not seem to have been followed up. ²⁷ He priced the 'plots' at 95 frs per hundred, compared to his bricks (6 / 11 / 22) at 79 frs per thousand (FLC R3-04 189), 18 February 1918. ²⁸ Brooks notes that a defect of the cold-pressed cinder blocks was their capillary transmission of moisture. It is certainly true that Jeanneret had to persuade clients that his blocks were truly 'dry' and not 'fresh'. See his letter to the architect Fournier, 4 November 1920, accepting the disastrous results of using porous bricks in the Frigorifique at La Rochelle but claiming that his bricks, made in the summer, were absolutely dry. Fresher bricks could be used for less important projects (FLC G1 02 611). ²⁹ Once again, I am indebted to Francesco Passanti for this information. ³⁰ Jeanneret to Dobler, 1 October 1920 (FLC G1-02 423). ³¹ Jeanneret to Dobler, 14 September 1920 (FLC G1-02 332). ³² 18 September 1920, Jeanneret to Société des Ciments de Beaumont (FLC G1-02 347). Jeanneret plugged his Tandem tiles for all he was worth in

October 22⁴⁰. In October 1920 he claimed in a letter to the Société des Travaux Publics that he had sold 1 million bricks to for the Grand Frigorifique de Tolbiac, but this should be taken with a pinch of salt⁴¹.

The detailed history of the briqueterie d'Alfortville remains to be written, but it is clear that by December 1920, SEIE owed around 566,000 frs to suppliers and other creditors and 250,000 to the stockholders, against which they could only set 710,000 frs of assets, including the dubious values of 256,000 frs for plant (the factory was eventually sold off for 45,000 frs in 1923) and 298,000 frs for unsold stock (which realised only a fraction of its value)⁴². In March 1921 the SEIE was forced to seek protection from its creditors under a 'règlement transactionnel' which was awarded by the Tribunal de Commerce on 11 April. From then it was simply a matter of time until the business was closed down. Whether the briqueterie might have been saved until the upturn of the construction industry in 1921-22 is difficult to assess, but what is certain is that Jeanneret gambled the available assets and small turnover on two speculative ventures whose failure precipitated the crisis of late 1920.

He embarked other speculative ventures between December 1919 and the autumn of 1920.

The context was the very uncertain one of a post war France gripped by economic depression on the one hand and a moral indignation on the subject of German war reparations which destabilised investment and the restoration of manufacturing industries⁴³. The Treaty of Versailles had established the principle that Germany and Austria should repay all the damage caused to the allies by its aggression. Unfortunately, no-one could agree either a figure for

total reparations or a means of payment which would allow Germany to create the wealth to carry out the payments. The end result was the French occupation of the Ruhr in 1923 and galloping inflation in Germany which allowed the debts to be repaid with increasingly worthless money.

The two most pressing issues, however, were the effects of war and German reparations on the key commodities of steel and coal. The Germans had destroyed many of the French coal mines. At the same time, the recuperation by France of the steel industries in Alsace created an increased demand for coal to fire the furnaces. But France had always been a significant importer of coal, from Britain and Germany. Forcing Germany to hand over stocks of coal at low prices would have benefited French industry but bankrupted the French coal industry. Attempting to force them to supply large quantities of steel would have had a similar effect on French steel prices. When the British coal mines began to experience a severe depression, producing strikes and a sharp downturn of production, the situation was made even worse. There simply wasn't enough coal around to heat the big cities, let alone light the furnaces of a struggling industrial revival. The result was to create price controls and a black market in scrap metal and unconventional forms of fuel. This is the world into which Jeanneret launched himself in November 1919.

JEANNERET'S DEALS IN SCRAP METAL

On 14 November 1919, Jeanneret wrote to a M. Eliot in Bordeaux, trying to purchase 100 tonnes (1 tonne = 100,000 kilos) of scrap

September and October, but with very little success. —33 9 November 1920 (FLC G1-02 624). —34 FLC G1-02 944. —35 Letters to Desjardins at Villers sur Fère en Tardenoy, on 13 and 16 November 1920 (FLC G1-02 648 and -667). This was part of a train load of 30 tonnes of bricks (200,000 aéro-scorie bricks) which Jeanneret sent to Desjardins on a similar sale or return basis (on a commission of 5 frs / 1,000). Jeanneret had approached Desjardins on 30 October 1920 offering a trading partnership to sell the bricks and tiles outside Paris (FLC G1-02 579). A correspondence ensued over the next six months to try to obtain some revenue from these sales and avoid paying charges at the rail-head. —36 FLC G1-03 256 and -200, and FLC G1-03 316. —37 FLC G1 03 547. —38 Jeanneret to parents, 9 January 1919 and 24 January 1920. —39 The stocks of 1,500,000 bricks accumulated in the summer had been reduced to 1,000,000 by the autumn. See letter to Fournier, 4 Nov 1920 where he says his stocks are 1,000,000 and where he claims that these 's'enlèvent, en ce moment ci, d'une manière de plus en plus accentuée, à la suite de divers chantiers qui ont été ouverts avec emploi de nos briques'. On 10 October he claimed to have 1,500,000 bricks in stock (FLC G1-02 475). —40 Jeanneret letter to P. Marishal, 22 October 1920 (FLC G1-02 533). —41 I have not been able to confirm this, whose credibility must be doubted, given Jeanneret's insider dealing with the Compagnie Industrielle du Froid (see above). He did sell 2,800 'plots' to Meyer & Cie for their building site in 28 October 1920 (FLC G1-02 555). —42 For this analysis, based on the SEIE accounts of December 1920, I am indebted to Francesco Passanti. —43 See M. Trachtenberg, *Reparation in World Politics*, Columbia University Press, New York 1980.



9

L'AÉRO-MÉLANGEUR
 procédé de L'ESPRIT NOUVEAU
 et donne des PRODUITS NOUVEAUX

EN ASSURANT **L'UTILISATION INTÉGRALE**
 des LIANTS, CEMENTS, CHAUX, BRAI, Etc.,
 et l'emploi de tous les SABLES, GRAVIERS, CENDRES, SCORIES, Etc.

DANS LA FABRICATION DU **BETON** ET DES **AGGLOMÉRÉS**
 GRAND PRIX DU CONCOURS DE PROCEDES ET DE MÉTIERS DE CONSTRUCTION DE LA TOUR DE L'EN 1919

Fabrication Française — Procédés Brevetés SPRENGER
MACHINE SPÉCIALE POUR AGGLOMÉRÉS COMBUSTIBLES
P. L. COUTURIER, R. AËBLET & C^{ie}, INGÉNIEURS-CONSTRUCTEURS
 15, RUE DE SUMÈNE, PARIS (8^e) — TÉLÉPHONE : ELYSÉES 15-08
WAGONNETS MOTORISÉS pour Voies étroites, CONCASSEURS, APPAREILS DE LEVAGE

10

9. 'Combiner voyage Bordeaux', Agenda

July 1920

10. L'Aéro-Melangeur

metal⁴⁴. He rather hoped M. Eliot would back-date the sale, to escape the 'suspension' in the sale of military materials. This is the deal he described to his parents on 24 January 1920 like this (in Allen Brooks's paraphrase): 'It's Saturday, I'm back from La Palisse, Bordeaux and Toulouse where I am trying to negotiate a deal worth sixteen million francs'⁴⁵.

He eventually (end of March, 1920) managed to buy 87 tonnes of iron and steel, consisting of 50 tonnes of sheet metal, 32 tonnes of angle iron and 5 tonnes strip metal, for 52,765 francs⁴⁶. The agent M. Simonot, was the sous Secrétaire d'État à la Liquidation de Stocks de Guerre. To raise this large sum, Jeanneret paid 30,000 from his private account and asked the CCF bank for credit on the rest⁴⁷. In a letter of 19 March 1920 he urged the bank to believe that this deal was bound to create a profit of at least 13,000 frs, even at prices 25% below market⁴⁸. This seems to have been linked to a proposal to form an investment company with M. Russier to build motorised steel barges (February 1920)⁴⁹. On 23d March 1920 Jeanneret is writing to the Naval yard at Cruybecke, Antwerp, asking if they can build steel barges 38.50 x 5.05 to Jeanneret's design⁵⁰.

Meanwhile, in December 1919, Jeanneret had also splashed out 62,327 francs in Le Havre on c.100 tonnes of iron and steel. This deal was carried out with M. Dupuis, also an agent for the Commission for the Liquidation of Stocks de Guerre⁵¹.

Jeanneret's efforts to cash in on this outlay of 115,092 francs began promisingly. For example, from the Dupuis sale, he managed to sell 25 tonnes to Richard et Naveau, for which he expected

28,750 frs⁵². This would have given him around 90% mark-up. Instead, he was paid 25,000 frs, on the grounds that the wagons were light by several tonnes⁵³. Despite protesting, and threatening the transportation agent, he only seems to have received 797 francs of the missing 3,750 frs⁵⁴. Even so, Jeanneret sold at 1,000 frs the tonne what he had bought at 606 frs the tonne, a mark-up of 65%. The law of 31 July 1919 had stipulated that liquidated stocks should not be traded at higher than 25% mark-up, and Jeanneret signed a declaration to this effect on 13 March 1920, so this wasn't bad work⁵⁵. But some of the remaining 75 tonnes seems to have got stuck in the Le Havre sea port of Tancarville, where it began to accumulate charges. It is possible that 20 tonnes sold to Lapauze in Paris on 29 April 1920, for 17,400 frs, came from this batch⁵⁶. At any rate, in April 1921 he was still struggling to avoid paying penalty charges on 4.6 tonnes of tube and 25 tonnes of sheet steel in the military depot of Tancarville in Le Havre⁵⁷.

The story of the Bordeaux wagon-loads was more satisfactory⁵⁸. Two sales were made, to Lapauze in Paris, for 50 tonnes and 37 tonnes, but a large amount, estimated at between 12.7 and 10.8 tonnes, went missing in transit on two trucks⁵⁹. On 1 June, Jeanneret accused the 'camionneur' who loaded the steel onto the trucks in Bordeaux of theft or negligence, and over the next 8 months pursued him, without success. His diaries are peppered with references to these transactions.

On 12 June he was planning a trip to Bordeaux and La Pallice to see Simonot and Rodriguez to try to sort things out and perhaps sell the remaining stocks (Fig. 9)⁶⁰. Jeanneret was able to charge

—44 The stocks were held in the port of La Pallice, La Rochelle (FLC E2-01 58), 14 / 11 / 1919. On 1st December Jeanneret wrote specifying the profiles he wanted (FLC E2-01 59). Note that a French tonne is equal to 1,000 kilos, as opposed to North American ton: 907 kilos or British ton: 1016 kilos. —45 Jeanneret to parents, 24 January 1920, paraphrased in Brooks, *op. cit.*, p. 500. —46 Jeanneret to Mrs Eliot in Bordeaux, 5 February 1920 (FLC G1-02 13), confirmed in a series of correspondence in March with Simonot, N.F. Rodriguez de Castro (who handled the sale) and Ducos the lorryman. The payment finally went off on 29 March. —47 The bank got its money back by taking two truck loads from the sale made later via Lapauze (FLC G1-02 71), 23 / 3 / 1920. —48 FLC G1-02 67. —49 Jeanneret to Russier, 5 February 1920 (FLC G1-02 11) and 5 March 1920 (FLC G1-02 41), proposing to set up a group to manufacture boats, with Russier at its head and to Simonot on 15 March (FLC G1-02 56), in which he says he is studying the design to build four boats. A M. Jessincourt was also involved, in an attempt to buy steel boats (FLC G1-02 29), 2 / 3 / 1920. Edoard Russier (a Canadian) had a business address in Le Havre but was persuaded to resign from this post to come to work in Paris in May 1920 as assistant to Jeanneret in SEIE, managing the brick factory and 'achats/ventes' (FLC G1-02 79), letter 22 / 3 / 1920. —50 FLC G1 02 86. The barges would be built to receive a diesel engine, and would have a capacity of 300-350 tonnes. He was also in correspondence with the Compagnie Lyonnaise de Navigation (FLC G1-02 32), 2 / 3 / 1920. He rejected the offer of two 250 tonne motorised barges from a Rotterdam company (24 / 3 / 1920, Van der Hilst, FLC G1-02 88). —51 (FLC E1-20 401) Letter to Dupuis, 26 December 1919. —52 27 / 12 / 1919 (FLC E2-20 365). —53 The wagons arrived at the Gare de La Chapelle near the Gare du Nord in Paris on 12 March 1920 (FLC G1-02 54) and the cheque for 25,000 frs 15th March 1920 (FLC G1-02 60). There then followed a long and increasingly bitter correspondence with the agent for the purchase Lajoinie. On 22 March Jeanneret wrote to Lajoinie claiming that he

73,950 frs for the 87 tonnes he had bought for 52,765 frs which, after deducting 6,000 frs for shipping offered him a profit of 15,285 frs, although it is still not clear whether this sum was ever paid in full, due to the missing wagons.

In both cases, Jeanneret's inexperience led him to place too much trust in agents and haulers in remote locations who had every reason to feather their nests and no real fear of prosecution. In the case of the Bordeaux shipment, neither the vendor nor the railway company would accept responsibility because Ducos had failed to enter a precise weight on the cargo manifest. In the case of the Le Havre consignment, Jeanneret's agent did not stay at the station long enough to check the wagons as they arrived, leading to the ensuing dispute. During this whole process, Jeanneret had to pay agents in Bordeaux and Le Havre, lawyers' bills and the time to write over a hundred letters and make countless phone calls, as well as at least three trips to Bordeaux and two to Le Havre⁶¹.

At least the market conditions, given the steel shortages, in the first half of 1920 were favourable. All things being equal, Jeanneret would have made a handsome profit on both these deals, selling at 850 frs and 1,000 frs respectively materials he had bought at just over 606 frs per tonne. But the market crashed during 1920, and the remaining stocks proved increasingly difficult to offload. Part of the reason was the modicum of success achieved at the Reparations conference in July 1920 at Spa, which produced a trickle of German reparations in kind. But, in November 1920, as the second issue of *L'Esprit Nouveau* appeared, Jeanneret still had 90 tonnes of miscellaneous scrap metal on his

hands, which he desperately tried to pass on to a string of clients, including the long-suffering Dan Niestlé. On 17 November, Jeanneret was offering the scrap at 630 frs the tonne⁶², on the 18th it had come down to 618 (and he told Niestlé that he had paid 613 frs per tonne for it) but by 26 November, the price was 610 frs, which, if Jeanneret were to be believed, would represent a loss. The final fate of this 90 tonnes cannot yet be ascertained but we must assume that they disappeared into the hands of the receiver Beaulavon under the 'règlement transactionnel' which led to his bankruptcy from the spring of 1921. From one symbolically potent material of industrialisation, we can now turn to the other foundation of the industrial revolution.

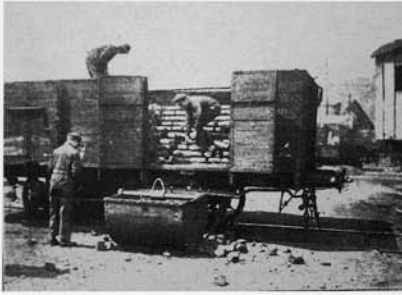
THE CROWN AND STAR BUSINESS; DEALING IN LOW GRADE COKE AND COAL

A little-observed detail on the advertisement of P.L.Couturier R.Aébi and Company, who made the 'Aéro-Mélangeur' machines Jeanneret used in the brick factory and printed in the first six issues of *L'Esprit Nouveau*, is the line: 'Machine spéciale pour agglomérés combustibles' (Fig. 10).

Jeanneret bought some of these special machines around July 1920, as the *Trois Rappels à MM Les Architectes* were being prepared for publication and began making briquettes of coke and coal dust.

The chronic coal shortage in France was made worse in 1920 by transportation strikes in France and coal strikes in Belgium,

was owed 1,267.50 frs (FLC G1-02 73). —54 This sum was paid by E.L. Bornand, of SABA on 15 July 1920 (FLC G1-02 267). It seems that SABA had a stake in these transactions. —55 FLC G1-02 59 and -58. —56 FLC G1-02 192. —57 See FLC G1-03 53, 30 April 1921. —58 In a letter to Russier, who by now was working as his agent in these 'achats-ventes' he said he had just returned from Bordeaux, where the Ministry of the Marine had acquisitioned 50 tonnes of his 'toles' (sheet metal) (FLC G1-02 19), letter to Russier, 9 / 4 / 1920. It's not clear whether this was from the original purchase of 87 tonnes or from another purchase of 100 tonnes, discussed but not confirmed on 14 November 1919 (see above FLC E2-01 58), since Jeanneret later referred to the whole lot, (4 September 1920 letter to Ducos (FLC G1-02 319). —59 On 18-19 June Jeanneret persuaded the bank in which he held his personal accounts (Credit Commercial de France), to accept the invoice to Lapauze of 31,450 frs, representing 37 tonnes of corniers as credit towards his account (FLC G1-02 224). In exchange they had a 'bon d'enlèvement' to charge against Lapauze. Jeanneret tried to persuade Lapauze, the purchaser, that the risk was his, on the grounds that their contract was at the point of sale (FLC G1-02 680), 17 November 1920. In January 1921 Lapauze was still trying to get 12,860 frs out of Ducos, the lorry man in (FLC G1-03 15). On 22 February he had resorted to a lawyer in Bordeaux to try to extract the money (FLC G1-03 27). —60 FLC G1-02 212. Jeanneret to Rodriguez and Agenda FLC F3-3 19. —61 For example, he paid 300 frs to a lawyer on 11 March 1921 for the 'Lapauze affair'. —62 FLC G1-02 671, 17 November 1920, attempt to sell 90 tonnes to Le Material Isolant at 630 frs / 100 kgs. Next day, he offers the same to Dan Niestlé for 618 frs / 100 kgs (FLC G1-02 686), and on 26 November he is offering them to the Manufacture d'Estampage du Nord Est at 610 frs / 100 kg. As we have seen, this is 4 francs above the price he paid.



11



12

France and Britain. Like everyone in Paris, Jeanneret had suffered from the cold. In January 1918, Jeanneret had bitterly complained to SABA about the inadequate fuel supplied to his office. His secretary Mademoiselle Satre Buisson had 'nearly died of pneumonia'⁶³. In fact the Minister Louis Loucheur had to meet the Parisian fuel crisis with stocks of wood saved for emergencies of this kind (Fig. 11)

Jeanneret believed that industrial unrest would lead to a sharp rise in the cost of fuel in the winter of 1920 (Fig. 12)

He therefore set about buying job lots of broken ('2d quality') British Crown and Star briquettes (which he described as the best, used by the British and French navies, 'pure Cardiff'⁶⁴). These he mixed with coal and coke dust and 'grésillons de coke' (coke chips). He offered these in various qualities: 'coke métalurgique' (which would not light by itself but could be added to lit boilers and was much in demand in the steel industry), 'coke-enrichi' (which consisted of the coke and coal dust mixture enriched with oil) and when both of these seemed unsatisfactory, half in half coke and coal. He appointed an agent, Berger, to canvas sales outlets, advising him, for instance, to try constructors of steam trucks, since these were not supposed to use coal, for reasons of pollution⁶⁵. By 9 October, Berger had only sold 4 tonnes of briquettes and Jeanneret urged him to speed up. One problem was that in the cold weather the briquettes hardened (due to a 'chemical combination') and wouldn't light⁶⁶. Another problem was that the briquettes were friable and broke up easily. Carrey, a client in Le Havre, having ordered 100 tonnes on 29 October 1920, complained on 8 November that the briquettes were 'unsellable' 'friables et réduisent en poussière' and stopped his cheque⁶⁷. Jeanneret rushed up to Le Havre next day and tried to get the agent Lemaître to intervene, to stop the wagons being

sent back. As a result of this intervention, the blame was put on Carrey's lorry-driver and a reduced proportion of the briquettes accepted by Carrey⁶⁸. By 29 December, with the payment for the briquettes still outstanding, Carrey was complaining that his clients would not accept the briquettes on quality grounds⁶⁹. On 31 May 1921, large quantities of the bricks were unsold in Tancarville, and Jeanneret was desperate to 'liquider cette affaire qui est plus que désastreuse'⁷⁰. In November 1921, the bailiff presented him with a bill for stocking charges and in February 1922 Jeanneret begged his agent to sell the briquettes as best he could 'even at auction'⁷¹. The final 1,556 frs payment for this load was only paid in February 1922⁷².

On 23 September 1920, the Banque Industrielle de Chine was threatening to foreclose on the debt, which now stood at 75,000fr. In trying to persuade them to delay, Jeanneret's arguments were less about bricks and a hoped-for revival of the construction industry, and more about the economic miracle he expected any moment now from the sale of his briquettes⁷³. Prices were temporarily low, he said, because of cheap war reparations German coal and an unusually warm winter. But he was setting up sales outlets and discussing deals which will ensure serious down payments which will 'transform our account'. He included production schedules and estimates showing the profits expected on the deals already signed. He hopes the cold weather will boost sales. He asked for their confidence for a few more weeks. But with hundreds of tons of coal and coke dust and fragments coming in, 40 tonnes per week, and no sign of a rise in prices, Jeanneret had to begin trying to resell the raw materials as they came in⁷⁴. He also started selling off the raw materials for his brick production and effectively stopped manufacture at Alfortville.

—63 Letters of 15 January 1918 (FLC R3-04 180). —64 Letter to Camus Duchemin et Cie, 29 / 10 / 1920 (FLC G1-02 525). In this letter he admits that the briquettes were now much better quality compared to the 10 tonnes of 'coke enrichi' he had sold him for 325 frs the tonne in September (see FLC G1-02 345). Based on a report written by Felix Colomer he was now mixing the coke powder with coal 50%. —65 Jeanneret to Berger 9 October 1920 (FLC G1-02 464). On 24 and 25 September 1920, he had offered him large quantities of grésillons de coke to sell (FLC G1-02 391 and -397). —66 Jeanneret to Berger 17 November 1920 (FLC G1-02 677). —67 29 October 1920 (FLC G1-02 563) and 8 November 1920 (FLC G1-02 619 and -625). —68 Jeanneret letter to Carey summarising the situation 12 November 1920 (FLC G1-02 642). —69 Jeanneret to Carrey 29 December 1920, refusing to accept that Carrey's clients will not buy the briquettes (FLC G1-02 1028). —70 Jeanneret to Lemaître, asking him to place the briquettes in the magasins généraux des docks du canal de Tancarville 31 May 1921 (FLC G1-03 97). —71 Jeanneret to Russier 22 November 1921 (FLC G1-03 352) and letter to the director of the Docks du Canal de Tancarville 9 February 1922, referring to the 'coal briquettes which are stocked in your warehouses and which belong to you' (FLC G1-03 445). —72 Jeanneret to Carrey 7 February

11. Coal briquettes being delivered during the railway strike in May 1920
(*L'illustration*, 15 May 1920)

12. Striking British miners charged by mounted police outside Downing Street
(*L'illustration*, 20 October 1920) (miners 1)

By this time, he was deep into the trade in 'traites' (IOUs redeemable in one or two months time) and 'valeurs' (date-limited credit based on an IOU from a third party) and opened a special account of discounted 'traites' at the bank⁷⁵. To give a flavour of this kind of business, Jeanneret owed large sums to Lhoir, Mangin and Legendre, suppliers of 356 tonnes of 'grésillons de coke'. On 26 October, 1920, Jeanneret explained that he could not pay off the 'traite' for 18,209 frs due on that day but could settle with a 'traite' of 15,000 frs and a cheque for the rest⁷⁶. Next day he found that Lhoir Mangin & Legendre had not waited for the cheque but had put the debt into the hands of the bailiff Rouille who had already sent it in for cashing up. Jeanneret rushed round to the bailiff to honour the cheque, but at the cost of additional charges⁷⁷.

By October, Jeanneret was trying to settle outstanding debts in briquettes and grésillons de coke. He even tried to pay off Ferrero, one of the companies who supplied the coal dust, in briquettes made from their own coal dust, while simultaneously trying to obtain a reduction in price on the grounds of the poor quality of their product⁷⁸. He also tried to offload to them some of his unused fragments of Crown and Star briquettes. Unsurprisingly, he had little success. Trying to sell coke and coal to coal dealers was a low point in Jeanneret's business career.

By 9 October, the Banque Industrielle de Chine was bouncing his cheques⁷⁹, and he was forced to offer as security 390 shares in l'Energie Industrielle, along with their valuable coupons, which Jeanneret hoped might be redeemed quickly, and an extension of his overdraft until January⁸⁰.

By November 1920, in addition to nearly 100,000 unsold bricks at Alfortville, Jeanneret had 1,000 tonnes of stockpiled coal and coke briquettes. He still hoped that some clients would

make big orders; on 13 December he complained to Truchon that the Galeries Lafayette had offered to take 1.5million francs' worth of briquettes and was now asking for a sale of 500 frs in compensation⁸¹.

So, let's summarise.

In the Spring of 1920, while the subscriptions for *L'Esprit Nouveau* (10,000 frs each in four instalments) were being collected from his friends, he embarked on the second of his two scrap metal deals. In July 1920, while the first three issues of *L'Esprit Nouveau* were being prepared for publication, Jeanneret was rushing around France trying to extract payment for missing trucks of steel and find buyers for unsold scrap metal.

In October 1920, with the appearance of *L'Esprit Nouveau 1*, he was buying large quantities of broken briquettes and coal dust and negotiating to postpone his 75,000fr overdraft at the bank. On 18 October he signs over his precious shares in L'Energie Industrielle, but by 28 October he has to accept that, with the overdraft now standing at 100,000 frs, he was not going to be able to redeem his shares. His own bank account, in the CCF is now being drawn in to cover the debts at the Banque Industrielle de Chine.

On 10 November 1920, with *L'Esprit Nouveau 2*, he wrote to his parents that he was just back from Le Havre, 'where I have been sorting out a tiresome business [the case of the briquettes which wouldn't sell]... Business is becoming critical, the vice is tightening. I don't know whether I'm going to survive. It's general, for the big and the small. My time is therefore pitiless and the Review takes me late into the night'. He writes about his hard life, 'pursuing daring and elevated goals.. I have withdrawn into myself, I no longer take any interest in details and have lost any sociability... You have no idea what the struggle in Paris is like.

1922 (FLC G1-03 441). —73 2,000 tonnes of good quality coke powder from British and French factories were earmarked for him, he said, and his briquettes had been tested in the laboratoire of the Arts et Metiers (FLC G1-02 396). —74 For example, on 25 September he tried to sell Truchon of Galeries Lafayette 150 tonnes of English coke fragments and another 150 tonnes of Crown and Star briquettes (FLC G1-02 395). —75 Jeanneret to the Credit Commercial de France bank 21 October 1920 (FLC G1-02 521). —76 FLC G1-02 558. —77 Jeanneret letter of 27 October 1920 (FLC G1-02 553). —78 Jeanneret to Ferrero, 28 Oct 1920, offering to sell them briquettes made from their powder at 275 frs. Also offering them briquettes made of half in half coke and coal for 300 frs. and 275 tonnes of Crown Star briquettes some in pieces and some in powder. Can sell either the whole peniche or the briquettes en fragments after criblage (FLC G1-02 554). —79 Jeanneret to Banque Industrielle de Chine, 9 October 1920 (FLC G1-02 460). —80 In fact, the bank later (July 1921) passed them on as security to one of Jeanneret's creditors, Truchon from the Galeries Lafayette. When he eventually called the debt in (February 1922), the last stage of the bankruptcy of SEIE was precipitated. —81 Jeanneret to Truchon 13 december 1920 referring to previous letter of 23 September (FLC G1-02 903).



13

SOCIÉTÉ D'ENTREPRISES INDUSTRIELLES ET D'ÉTUDES
PARIS — 20 rue de Valenciennes
BRIQUETERIE D'ALFORTVILLE

Le SEUL maître de construction moderne grâce à un **COEFFICIENT d'isolation** presque égale à celui du Bois, résolu par méthodes scientifiques variées par usage de l'aéro-scorie.

Le Matériau
stabilité
l'habitation
salubre

BRIQUES AÉRO-SCORIE

14



15

Ford

LA PLUS ROBUSTE: LA 'MONN' CHEER'
LA PLUS ÉLEGANTE: LA PLUS ÉCONOMIQUE: LA 'L.L.E. SCOT' OU 'GARAGE WINDSOR'

Garage Windsor

SPÉCIFICATIONS POUR FORD & LE SEUL
Détaillez sur coup de Téléphone

16

13. 'Trois Rappels à MM. Les Architectes: 3', *L'Esprit Nouveau* 4, January 1921
14. Briqueterie d'Alfortville, advertisement, *L'Esprit Nouveau* 1-5
15. 'Une Villa de Le Corbusier', *L'Esprit Nouveau* 6, March 1921
16. Advertisement for Garage Windsor, Ford dealer, *L'Esprit Nouveau* 1-3)

You have to have staked your claim to find this out. And this in the world of ideas⁸². Jeanneret's elision of business dealings and the struggle to make it in the intellectual arena is very significant.

Unsurprisingly, he was too busy in December to insert his third Rappel. On 13 December he actually tried to offload 50 tonnes of his briquettes on the Bank at a heavily discounted price (250 frs)⁸³. He told them, if they mixed the briquettes with anthracite, they would burn. On 15 December 1920 he wrote to his parents, 'I await my destiny which depends not on me but on fate.' Brooks notes that his mother was reduced to tears by this⁸⁴. On 29 December 1920 Jeanneret wrote to his parents: 'I'm losing a great deal of money, that's true. But my life has never been more replete than now. You know I'm not the type to lie down and quit. If a storm today sweeps my business away it destroys money and nothing more. I feel pity for those who are attached to money! This crisis may actually improve life for me by allowing me to undertake activities more appropriate to my skills, and which are the results of my own initiatives'⁸⁵.

In January 1921, soon after the Perret interview about his City of Towers, documented for us by Francesco Passanti⁸⁶, the third of the Rappels is published, with Le Corbusier-Saugnier's own designs developed from Hénard and Perret. This article is one of the first to draw together all the aspects of Le Corbusier's architectural and urban thought, opening dramatically with his analysis of the Akropolis and continuing to exhibit his housing models, including the towers and Citrohan. Jeanneret sends this article to a number of people with some encouraging words. Le Corbusier is struggling free from Jeanneret (Fig. 13).

From February-April 1921, as his articles become ever more architectural and divorced from the industrial context, his financial situation grinds inevitably to bankruptcy. The advertisement for the Briqueterie d'Alfortville appears for the last time in *L'Esprit Nouveau* 5 (Fig 14). In issue 6, March 1921, the architect Le Corbusier has his first apotheosis in *L'Esprit Nouveau*, in a carefully stage-managed review of the Villa Schwob (Fig. 15).

On 22 March 1921 the SEIE at its extraordinary meeting asks the Tribunal de Commerce for a 'règlement transactionnel' (a form of receivership) and this is granted on 11 April⁸⁷. From then on the affairs of SEIE are in the hands of the receiver Beaulavon, under the règlement transactionnel obtained from the Tribunal de commerce while his articles hit the high note of Modernism.

Curiously, in June 1921, the Briqueterie went briefly back into production now (producing between 25,000 and 67,000 bricks per week), but of course it was working not for Jeanneret but to pay off the creditors, managed by the Comptoir Brique et Tuile. Jeanneret received only 30 frs per thousand bricks sold. On 29 July the faithful foreman Houdet, who worked at the Briqueterie from 15 August 1919 was given his papers. On 31 July the factory was closed and Madame Petit, his secretary since 9 January 1919 was given her papers. Various plans to sell off the Briqueterie were canvassed, including one to sell the equipment to Barcelona.

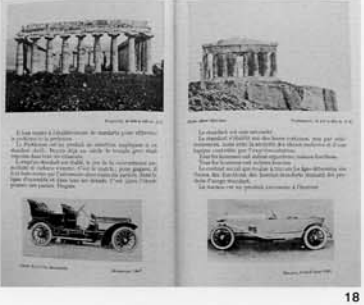
The modernist imagery of his articles and the confident tone of his arguments are now fully engaged.

One after the other, over the next year, his court cases against his creditors fail, including his attempt to sue Bellec, manager of

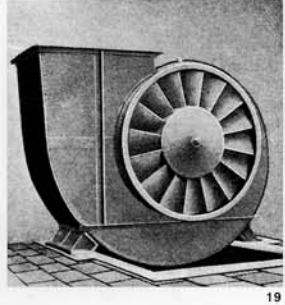
—82—... Le Havre ou je suis allé démêler une affaire embêtante. Les affaires deviennent critiques, l'état se resserre. On ne sait plus si on tiendra. C'est général, les gros et les petits. Mon temps est donc sans pitié. Et les soirs sont pris tard par la Revue, etc...' 'poursuivant des buts audacieux et élevés, je suis replié sur moi et ne sais plus m'intéresser aux détails et ne sais plus être un homme de compagnie'... 'Vous n'imaginez pas ce qu'est la lutte à Paris. Il faut y avoir pose sa candidature pour s'en apercevoir. Ceci dans le domaine des idées'. Letter to parents, 10 November 1920 (Jerjer, *op. cit.*, p. 154). —83 Jeanneret to Faubert, 13 December 1920



17



18



19

17. Advertisement for Delage 'La voiture qui vient', *L'Esprit Nouveau* 12 and 13
 18. *L'Esprit Nouveau* 10, before Nov 1921, Parthenon
 19. Rateau ventilator, *L'Esprit Nouveau* 13, December 1921

the Briqueterie, for theft or misappropriation (150,000 bricks had gone missing on 1st January 1921 and a further 250,000 bricks in April, when Jeanneret had caught him in 'flagrant délit de détournement'). Finally, someone was finding a use for Aero Scorie bricks⁸⁸. The agony went on, however, well into 1922, with Le Corbusier continuing to pay off his debts as best he could, while opening his private bank account to scrutiny. On 4 March 1922, all but three of the creditors, representing 241,186 frs voted to accept the winding down of the business⁸⁹, but sales of bricks and tiles continued spasmodically until June 1923 and the final liquidation of the Jeanneret's business only took place then.

CONCLUSION

Jeanneret's first automobile was a Ford, and his tale of woes in October 1920 had been completed by a 'slight accident with a taxi' (Fig. 16)⁹⁰.

The gap between the reality of industrial production and the symbolism of modernity is nicely encapsulated by this incident. The cars which represented a claim to modernity for French industry, the Citroëns, Renaults and Voisins, could outstrip the American Ford only by styling and the perfecting of form. It is the advertisement of the Delage, published in the *L'Esprit Nouveau* numbers 11/12 and 13 which captures this spirit (Fig. 17).

As Jeanneret left the troublesome realities of real machines and processes behind him, Le Corbusier could begin to trade freely in the icons of Modern architecture. (Figs. 18, 19).

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He is currently working as selector for a major exhibition on Art Deco to be presented at the Victoria and Albert Museum in April 2003 and in Toronto (autumn 2003), San Francisco (spring 2004) and Boston (autumn 2004).

(FLC G1-02 904). —84 Brooks, *op.cit.* p. 502. —85 Brooks *op.cit.* p. 502 —86 F. Passanti, 'The skyscrapers of the Ville Contemporaine', *Assemblage* 4, 1987, pp. 52-65. —87 I am grateful to Francesco Passanti for this information, based on the minutes of the meeting, which I have not seen. —88 Jeanneret to Bellec, summarising the situation, 8 August 1921 (FLC G1-03 288). —89 Jeanneret to Russier, warning him to expect that the 'règlement transactionnel sera homologué à brève échéance'. 3 creditors (representing 12,473 frs) voted against closure (FLC G1-03 466). —90 Jeanneret to the insurance company SGCA, 11 October 1920 (FLC G1-02 473).