Abstract

This article makes use of a recently-unearthed archive in Sweden, complemented by research in the India Office Records and Maharashtra State Archives, to explore the business networks of the small-scale railway contractor in 1860s Bombay Presidency. The argument centres on the career of one individual, comparing him with several contemporaries. In contrast to their civilian colleagues, freebooting engineers have been a somewhat understudied group. Sometimes lacking formal technical training, and without an official position in colonial India, they were distrusted as profiteering, even corrupt, opportunists. This article will present them instead as a diverse professional class, incorporating Parsis alongside various European nationalities, who became specialists in local milieux, sourcing timber and stone at the lowest prices and retaining the loyalty of itinerant labourers. It will propose that the 1860s cotton boom in western India provided them with a short-lived window of opportunity in which to flourish, and to diversify into a variety of speculative enterprises including cotton trading, land reclamation and explosives. The accidents and bridge collapses of the 1867 monsoon, and subsequent public outcry, will be identified as a watershed after which that window of opportunity begins to shut. The article’s concluding section analyses the contractors’ relationship with their labour force and its intermediary representatives, and strategies for defusing strikes. Ultimately, small independent contractors were agents of modernity not formally affiliated with the imperial project, and forced to bargain with merchants and strikers without official backing. Theirs is a record of complex negotiations at the local level, carried out in the immediate post-Mutiny settlement.

Introduction

... allow me to inform you that if I have any talent at all it is in being able to manage things cheaply, which is the reason I am worth what I am. I know many here who have had better chances than I have of making a fortune and who are not worth Rs 100 after years of work…

A touch of impatience with a risk-averse father affords us a rare, personal statement from a successful early contractor of the Great Indian Peninsula Railway (G. I. P. R.). After nine years in the Bombay Presidency and Central Provinces, in 1868 Joseph Samuel Frithiof Stephens was preparing to go home—though not to Britain, but to Scandinavia. His precise destination was a tract of forest, near Huseby in Småland, that he hoped might be turned to account. Swedish iron had already made its appearance on the Bombay market, and the lakebeds on his new estate were waiting to be dredged for ore. He also knew of the demand for creosoted pine sleepers on the G. I. P. R. and, now a railway promoter instead of a contractor, he wanted a line to haul these cargoes to the coast. Roughly half a million rupees of hitherto mobile capital were now sunk in landed property and machinery. Meanwhile the paper-trail of that Indian fortune—letters, receipts, maps and diagrams, payrolls, subcontracts, and diaries—went into a shipping crate in the attic of the manor house. Two generations passed at Huseby Bruk. Joseph’s line died out. The house and its land reverted to
the state, and in 2008 this forgotten archive was unearthed by conservators and moved to the library of Linnaeus University in Växjö.¹

Running to some twenty boxes, the Stephens documents form the remarkably complete record of a railway contractor’s transactions, business network, and daily life. The archive is not without its lacunae: we lack Stephens’s outgoing correspondence to his agents, as well as the diaries for his last five years in India. But what remains is evidently the work of a scrupulous record-keeper. His papers offer scope for many separate lines of enquiry—not least the role of colonial wealth in Swedish industrialization—but my discussion will confine itself to Stephens’s business methods and business networks. These networks can be seen to extend both above and below: that is, with both the larger contractors and engineering staff directing Stephens, and with the broad mobile labour pool that he did his best to manage. Something on which the archive is particularly informative is the employment and retention of workers, and negotiation with strikers. It is also possible to closely triangulate Stephens’s situation as an intermediary between ‘cooie’ and capital—a category that is now receiving renewed interest from scholars, most extensively in a recent special issue of the International Review of Social History.² In respect to labour relations, therefore, the second half of this article will aim to further this trend, and to throw into sharper relief the topography mapped out by Ian J. Kerr in Building the Railways of the Raj. The first two sections, though, will place the subject more closely within his milieu, both as a Scandinavian and as a petty, later mid-sized, contractor.

However efficient a business, Stephens & Co. by no means ranked among the major establishments of its time. For most of his Indian career, Stephens executed embankments, small bridges and station buildings on subcontract to larger firms. He personally organized labour at the local level, later engaging two or at most three ‘agents’ or subordinates for between Rs 150 and Rs 200 per month. The diaries describe a fatiguing and isolated life: mornings and evenings spent on horseback surveying the little empire allotted to him, the purchase of timber and charcoal from local merchants, the supervision of quarries for the supply of ballast, and whole days spent in paying—or withholding—wages with the help of a Gujarati or Jewish clerk. Bombay is seen occasionally, but Stephens relies principally on city friends to keep him in-the-know about upcoming opportunities to tender. Life revolves around the bungalow: colleagues stay the night, or loafers mooch in demanding work;³ cooks argue and butlers abscond; he collects bird’s eggs and dabbles in photography; tools are downed for Muslim or Hindu festivals; earthwork slips, a boy is crushed and the parents paid off.

Men like this are shadowy, elusive figures in early railway history. Writing of the United States, Walter Licht confessed that it was ‘practically impossible’ for the industrial historian

¹ References to documents in the Huseby Archive are indicated with ‘Linn.’, followed by the box number and date or folder title. I would like to express my gratitude to the librarians of Linnaeus University, and to its Centre for Concurrences in Colonial and Postcolonial studies, for funding and facilitating my research.

² Mediating Labour: Worldwide Labour Intermediation in the Nineteenth and Twentieth Centuries, special issue of the International Review of Social History 57 (December 2012).

³ See Linn. FIF:1 [diaries], 21 Apr 1861 and 11 Feb 1862 for such requests from a European sailor and ‘a tramp’. A ‘shabby looking Englishman’ also passes through on 11 Sept 1861. These interlopers may indicate a growth in European vagrancy following the end of Company rule and the reorganization of its armies.
‘to learn about the independent contractors and their experiences’. The Stephens archive would represent a substantial find even in Europe or North America. In the colonial context it is particularly valuable. If the archive’s survival is highly fortuitous, however, its specific provenance—the G. I. P. R. in the first decade of intense construction—is no accident. The circumstances and company policy of the time, I will argue, created a short-lived but favourable climate for opportunists of slender means and doubtful background. We will see how these slightly ad hoc arrangements came about, and we will see them put under strain during the disastrous accidents and bridge collapses of the 1867 monsoon.

**Company and contractor during the first twenty years of the G. I. P. R.**

The Anglophone press of the 1850s and 1860s, not least specialist periodicals like the *Engineer’s Journal* (Calcutta) or *Bombay Builder*, often dwelt on the desirability—or otherwise—of introducing the contract system under which British railways had already been laid. Soliciting tenders for public works was not new to India. Indeed, it was in the Bombay Presidency that *The Engineer* (London) suspected the practice had been longest established. The contract system was used at ‘a comparatively early date’ for maintaining roads on the island of Salsette, and in 1843 a similar plan was introduced for the maintenance of ‘the Poona and Panwell road about the Ghauts’. That the coming of the railway had also signalled the arrival of itinerant European contractors was a natural progression, therefore, as was the consequent trend for other works and industries to adopt the contract system. Its advantages over the ‘Departmental System’ (whereby construction fell to officers of the railway company or Public Works Department, directly supervising low-level indigenous contractors) were put forward eloquently by the *Bombay Quarterly Review* in 1855. Firstly, contractors had a personal, financial incentive to finish their work on time; if incompetent, they could also be dismissed without notice and replaced by rivals. Furthermore, given the chance they would become specialists in the local acquisition of materials and labour, and in circumventing the ‘obstinate monopolies’ or cartels through which Indian merchants would attempt to fix prices against railway companies (as had occurred recently, the *Quarterly* noted, in the Bombay timber market).

Despite this sanguine assessment, contracting did not catch on universally. Railways in Madras stuck stubbornly to the departmental system, while in Bengal the East Indian Railway suffered an early, chastening experience. Unable at first to attract the ‘respectable’ metropolitan tycoons who would later do them proud, such as Thomas Brassey, they fell back on under-capitalized local firms which promptly folded. Private opinions amongst the

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5 *The Engineer*. 27/685 (12 Feb 1869), p. 121.


7 According to a note by Captain E. C. S. Williams, Brassey was unwilling to tender for the East Indian Railway before 1858 because he felt Government was exercising too much control over proceedings. One of the wealthiest contractors of his day, he later undertook its ‘Chord Line’ from Calcutta to Delhi. See S. Settar (ed.), *Railway Construction in India: Select Documents*, 4 vols. (New Delhi: Northern Book Centre, 1999-2009), II, 204.
contemporary administration often seem to rest on the individual’s general degree of respect for free enterprise. ‘I have always found that the employees of a contractor enjoy greater liberty of action than those of a Company, and that the employees of a Company have greater liberty of action than those of a Government.’ This was G. L. Molesworth, Consulting Engineer to the Indian government, very much echoing the views of the viceroy who appointed him, Lord Mayo. By contrast, in an outgoing Minute of 1869 Mayo’s predecessor, the paternalist liberal John Lawrence, had alluded to the ‘notorious’ and ‘flagrant failures’ of contractors who should have been more closely watched by the companies that engaged them.\(^8\) We will touch later on some of the various 1860s mishaps that had left such a bitter taste.

The jury was still out in 1868 when Edward Davidson published the first history of India’s rail development, taking careful note of the ‘petty’ contractors who had disappointed the East Indian Railway, and the company’s subsequent success with Thomas Brassey. His view was that the G. I. P. R. in Western India had in fact shown the way, despite undoubted shortcomings in execution, by letting their line in ‘a system of large contracts’ to well-established British firms.\(^9\) Dividing their network into sections, they had for example awarded the stretch from Igatpuri to Bhusawal to Messrs Wythes & Jackson, and the important branch from Bhusawal to Nagpur to Lee, Watson & Aiton. The very first contract, from Bombay to Thane, had been won by Fowler & Faviell in 1851.

Davidson seems to have overlooked, however, that from the earliest years of the G. I. P. R. these larger men had actively subletted to many smaller players. Struggling to keep his costs down, William Faviell had converted his agents to risk-accepting subcontractors with an additional incentive to squeeze labour—a policy that persisted even though, as Ian J. Kerr suggests, it led directly to the Bhore Ghat disturbances of 1859 in which one European was killed.\(^10\) This well-publicized commotion among a large and restive workforce adds another dimension to anti-contractor sentiment. In the same year, the *Calcutta Review* took note of ‘a daily increasing class of Europeans, those employed on the Indian railways, many of them rough, uneducated men’.\(^11\) It was feared that these platelayers, boiler-makers and petty contractors—ignorant of the customs and language of the natives, but well-persuaded of their villainy by the late Rebellion—would betray racial prestige. Such anxieties were not without precedent. The great reformer Ram Mohan Roy had put forward similar arguments in 1833, when the East India Company lost its battle to protect its monopoly and keep ‘interlopers’ out of its territories.\(^12\) Subsequently a population of indigo planters established themselves in Bengal, though the *Calcutta Review* downplays their reputation for brutality and coercion.

The same article remarks that a roughneck minority among them ‘were seafaring men who, leaving their ships, took service as factors with the Calcutta agency firms’, while the majority, as a subsequent article makes clear, were of ‘the middle class… the sons of traders,

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\(^8\) Ibid., II, 487, 304.


merchants, farmers, and manufacturers, lawyers, clergymen, and doctors, officers of the army, navy and civil service. Within twenty years of 1833 the number of non-official residents had increased from some 2000 to more than 10,000, while by 1858 that number would rise to 22,000, after which press scrutiny intensifies. The new influx was markedly more working-class, argues Harald Fischer-Tiné, principally connected with railways but also with the growth of the tea industry. Indeed, as one old hand recalled, during the tea bubble of the 1860s proprietors were extraordinarily lax in their appointment of plantation staff:

[An]y one—literally any one—was taken, and Tea planters in those days were a strange medley of retired or cashiered Army and Navy officers, medical men, engineers, veterinary surgeons, steamer captains, chemists, shopkeepers of all kinds, stable-keepers, used-up policemen, clerks and goodness knows who besides.

This declining order of respectability offers an interesting analogue to the railways, especially if it can eventually be shown that here too there was a perceptible and perhaps even deliberate reduction in ‘adventurers’. As even the most sentimental historian of the tea industry admits, the continuance of the hiring policy of the 1860s would have meant not only inefficiency for the planters but also ‘tyranny’ for the workers. We will hear more of William Faviell’s abuses later, but in respect to business practice his rule (Henry Fowler had succumbed to the Indian climate in 1854), set other bad precedents for years to come. His Mechanical Engineer, Godfrey Oates Mann, leaves a picture of a mean and abusive employer fixed in a confrontational attitude with Company staff (he supposedly sacked a mason for doing his job ‘too well’, and ‘working for the Engineers’). This was no doubt matched on the Company side by suspicion and resentment. In 1868, for example, a senior official wrote to the board in London complaining about ‘pampered’ contractors who will resort to any pretext to obtain increased rates, and who soon learn the contents of any private correspondence about their doings from the Company’s pliable ‘native employees’.

The unsettled nature of this climate was, nonetheless, the very factor that favoured Joseph Stephens and men like him. He began as an agent’s assistant under a minor figure named E.W. Winton, before subcontracting for Wythes & Jackson and then Lee, Watson & Aiton. His intercourse with these bosses was relatively slight: in the diaries they come along the line periodically by engine or trolley, but are more commonly represented by their inspectors—

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17 British Library, *India Office Records* (henceforward IOR), Photo.Eur.197 [Mann to his father, 16 Jan 1852]. It also seems that Faviell, who was for example ten years senior to John Abbott, considered the Company’s engineers callow and fickle—a belated order to replace a level-crossing with a bridge seems to have particularly vexed him.
though on one occasion Alexander Lee makes a penetrating audit of Stephens’s accounts, before consenting to a Rs 6000 advance.\textsuperscript{19} This last incident is revealing. Stephens was not paid directly, but was given a cheque which he was told to encash with Charles Payne, the Company’s Superintendent on the Nagpur Branch. The transaction not only makes it clear that Stephens was often struggling for funds, but also seems to support Kerr’s assertion that his employers were themselves undercapitalized and reliant on Company advances. Davidson had clearly overestimated the ‘wealth and respectability’ of firms like Wythes & Jackson (much-criticized for their slowness) and Duckett & Stead (who failed altogether).\textsuperscript{20} Indeed, some of the Bombay Presidency’s contractors were evidently not practical men at all but ‘capitalists’, who won contracts only to sublet\textsuperscript{21}, or even crooks who milked the Company for advances before packing up work. The cotton boom that fuelled early railway construction on the west coast had been triggered by the North’s blockade of southern ports during the American Civil War, and as the Bombay Builder observed the conclusion of hostilities had diverted many erstwhile stock-jobbers to a new field of speculation: ‘the brokers of 1864-5 are transformed into the most enterprising contractors of 1867’.\textsuperscript{22} They were not alone in jumping ship. Kerr registers a ‘parade of G. I. P. R. engineers’ who deserted the Company to go freelance, and in 1869 a bemused official reported meeting an ‘anomalous’ man who remained on its payroll while acting effectively as the representative of three petty contractors.\textsuperscript{23} The Linnaeus documents also offer evidence to confirm Kerr’s ‘tantalizing’ proposal that some if not many small-time contractors may in fact have been local shopkeepers looking to further their trade.\textsuperscript{24}

1860s Bombay was plainly a volatile and unregulated economy, with railway building characterized by a long chain of deferred risk. Indeed, for some officials it may even have become an object-lesson in how not to do things.\textsuperscript{25} As Ian Derbyshire has described, sectional contracts promoted labour competition; moreover, the system left senior figures with little control over Indian subcontracting chains.\textsuperscript{26} Both of these drawbacks are reflected in the experience of Stephens, who devised incentives to retain workers, as we will see; and who was at liberty to engage Indian suppliers of labour, lime, stone and timber, but was also to a large degree dependent on them. Letting lines in sections to firms like Lee, Watson & Aiton would become less common, most subsequent railways being built on the departmental system, with engineers directly supervising petty contractors who were increasingly Indian. The fluid quality of Stephens’s milieu, then, is of great significance for our inquiry. It is

\textsuperscript{19} Linn. Flif:1 [diaries], 18 Feb 1863; 9 May 1863.
\textsuperscript{20} Kerr, Building the Railways of the Raj, 1850-1900 (Delhi: Oxford University Press, 1997), pp. 56-58.
\textsuperscript{21} The Engineer’s Journal (Calcutta), 15 Mar 1869, p. 47.
\textsuperscript{22} Bombay Builder 3/3 (5 Sept 1867), p. 95. This accusation is amply borne out by the Bombay Almanack and Directory. From the end of 1864 to the end of 1866, the total number of contractors (mostly railway) in the Mofussil increased from 41 to 50. In Bombay city, contractors (mainly non-railway) rose from 21 to 48. The number of contractors’ agents and employees remained fairly constant.
\textsuperscript{23} Kerr, Building the Railways, p. 82; IOR/L/PWD/3/69 – dispatch no. 12 (12 Feb 1869).
\textsuperscript{24} See discussion below, in the final section, of Dadabhoy Dorabjee and Venketish. Kerr’s proposal is based on a remark by Thomas Brassey, quoted in Building the Railways, p. 151.
\textsuperscript{25} Ibid., p. 74.
considerably less likely that in another time or place he would have succeeded in ultimately rising to the status of his former employers, making perhaps his greatest profits constructing station buildings on the Nagpur Branch. Furthermore, he may not have established himself in India at all, had he not arrived in the heyday of firms who, as one government engineer complained in 1859, were free to sublet to miscellaneous knockabouts who proved themselves ‘neither educated nor respectable nor scrupulous’.

‘A daily increasing class of Europeans’: enterprising middlemen in the cotton boom

If he possessed an innate knack of managing things cheaply, the colonial outlet for this talent Stephens owed entirely to happenstance. His was not an engineering family; on the contrary, his father’s vocation was the chivalric past. George Stephens was a Liverpoolian Methodist who migrated to Sweden in 1834, where his interest in runic inscriptions led to a career as a distinguished antiquary. His son Joseph and elder daughter Ingeborg were born in Stockholm, but raised in Denmark after their father won a chair at Copenhagen University. Here John Hallen Abbott, an English engineer at work on the Zealand Railway, married into the family before leaving with Ingeborg for India in 1857. He had joined the G. I. P. R.’s staff in an unpropitious year. The young couple were forced to flee their upcountry bungalow at the outbreak of rebellion, but notwithstanding this scare Ingeborg’s brother was persuaded to follow them in late 1859. Still aged only eighteen, his CV must have made quick reading. For the first year he served a loose apprenticeship with Abbott, honed his draughtsmanship, made some inroads in the vernacular, and digested an instruction manual by William Davis Haskoll.

Stephens’s example raises the question of how many of his contemporaries were, likewise, autodidacts with no formal qualification. This was no doubt a contributing factor to the class snobbery that appears to underlie exchanges, often adversarial, between the professional cadre of engineers attached to railway companies or the Public Works Department (P. W. D.) and the more heterogeneous body of contractors under their supervision. The teenaged Stephens had clearly hoped to become one of the former, and did not disguise his disappointment when Abbott instead found him an assistantship under a contractor, E.W. Winton: ‘he did not seem much to relish the idea fancying perhaps that it was lowering himself down somewhat’.

Although he fails to account for noticeable Scottish representation, Derbyshire’s inspection of the covenants signed by East India Railway staff upon their appointment in Britain suggests that engineers were typically drawn from London

27 To give an idea of the sums involved, Stephens received Rs 12921 from the G. I. P. R. for work done in April 1867, followed by Rs 21405 in May, Linn/Fla:7 [G. I. P. R. Company’s office Bombay, 1866-69].
28 Quoted in Kerr, Building the Railways, p. 57.
29 This venture bankrupted its English contractors Fox & Henderson, who had earlier built the Crystal Palace.
30 Probably Railway Construction (London, 1857). Several other illustrated manuals used by Stephens in India are still shelved in his former study at Huseby Bruk.
31 Though they must be received with circumspection, eloquent sources for this class prejudice can be found in Anglo-Indian fiction. Mr Brown, a former riveter turned wealthy contractor, is derided as ‘a bloated mechanic’ by P. W. D. officers in Flora Annie Steel’s novel The Potter’s Thumb (London and Edinburgh: T. Nelson & Sons, 1914), p. 424.
32 Linn. EI:8c, 23 Dec 1860.
and the Home Counties (Abbott himself was the son of a City solicitor). Footplate and workshop staff, on the other hand, gave addresses in the Midlands and the North.  

33 Ranking socially somewhere between the two groups, the contractors seem at least initially to have been firmly affiliated with the latter milieu. Fowler and Faviell were both Yorkshireman, as was Godfrey Oates Mann (Faviell had written to the latter’s father in Leeds requesting competent subcontractors for the project). If this gives us an idea of the social blocs that divided engineers from contractors, however, Stephens’s networks as well as his own example suggest a more diverse and less exclusive field of enterprise. ‘Fear God and flee the devil’, the Methodist professor told his son on departure, before minding him also to take care with his spelling.  

34 Most probably English was not his first language. Whether he spoke with a Scandinavian accent is a matter of guesswork, but his appetite for Danish newspapers sent from home, his reference to a ‘watermonster’ (presumably a crocodile), and his inviting friends for a rubber of ‘hvist’ one evening gives us a clue perhaps to how his contemporaries may have heard and perceived him. Whether or not he felt the need to assert his Englishness, however, he need not have felt the odd man out. The government at Brussels was the first in continental Europe to embrace rail transport, and an encounter with a Belgian contractor in 1862 was an opportunity for sneering: ‘he had got no servant of any kind, did not know a word of Hindostanee and spoke broken English, altogether badly off.’  

35 Stephens later took on two fellow-Scandinavians as agents—one a family friend, Charles Brandt; the other, Tegnér, a labourer in a Bombay sawmill—and the archive also brings to light two Dutchmen, Rolf and Coen. These names are especially valuable since all seemed to have passed under the radar of the almanacs, although the latter do draw attention to the substantial Indo-Portuguese contingent on the railways. Among the eighty-five contractors listed in the Times of India Calendar and Directory for 1868, we find Alves, Bartola, Costa, Lobo, Pinto and Xavier, as well as William Isaac Sargon—possibly an Anglicised Jew. Another of Stephens’s agents, Louis Pereira, also sprang presumably from the former milieu.

Furthermore, it is vital to remember that Parsi contractors, who even before the coming of the railways had been commissioned to build municipal water-works and other projects for the city of Bombay, were swift to capitalize in this new field. According to a memoir compiled by one of the early route surveyors, Arthur West, it was even the ‘policy’ of the G. I. P. R.’s first Chief Engineer, J. J. Berkley, ‘to interest the natives in Railway works.’ ‘The profits would be kept in the country, instead of going to Europe, besides other reasons.’  

39 Inasmuch as their competition cut into Faviell’s profits, they may indeed have contributed to

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34 Linn. EI:3a (George to Joseph Stephens, 29 Jun 1860).

35 A letter from John Abbott two years before Joseph’s departure for India compliments ‘the decided improvement you have made in your English’. Linn. EI:8c (24 Jun 1857).

36 Linn. FIf:1 [diaries], 19 Feb 1863, 13 Mar 1863.

37 Ibid., 6 Jan 1862. Possibly this Belgian is the ‘Charmois’ mentioned later on 9 Mar 1863.


the rise in subcontracting (Godfrey Oates Mann also take rueful note of Berkley’s attitude, and of Faviell’s difficulty in bringing his estimates below those offered by the Parsis). The most successful among them was undoubtedly Jamshedji Dorabji, who won the G. I. P. R.’s third contract and later expanded his operations to Gujarat, and who would appear to be the man Stephens hoped—with typical opportunism—might fail on a length of double-tracking in 1866. ‘[A]s he did the work between Wassind and Russara’, however, Stephens’s Company informant confided, ‘[I] think he is likely to stick at a small job like that between Nandgaum and Chalisgaum.’

G. B. Peck, Stephens’s long-suffering agent at Amravati, also purchased some stone from a Parsi engaged on a nearby barrack when his own supplier failed, while the arrival of a representative from a major contractor to buy up Stephens’s remaining plant at the conclusion of his Indian career indicates perhaps a strengthened grip on the market following the departure of the first generation of Europeans. The role of the Parsis further complicates our picture of the contractors, and adds a racialized slant to the distrust of them voiced in the press and amongst their betters.

To focus on Stephens, it is clear that he very much favoured the pertinacious and pugnacious stance often complained of by engineers. During his early years he was in frequent dispute with Charles Payne, Superintendent of the Nagpur Branch, and the latter’s colleague Richard Stack over the quality of his masonry, the trio nearly coming ‘to high word [sic]’ over the Ullusna [Alasana] Bridge in 1863. In an amusing episode four months earlier, Stephens had been forced to ‘sceme [sic] a good deal’ to conceal a bad error on another bridge from the company’s ‘Maistry’ (probably an Indian inspector on patrol), working all night to correct the error. ‘At the bridge in the morning, Stack there and he made no complaints for a wonder.’ Not all engineers were so vigilant: John Wells, Stephens’s sometime partner and later rival, was told for example that he might use ‘inferior ballast so long as he made a good road’. Neither were their overseers altogether impartial amidst often cutthroat competition. According to Peck, in 1867 a rival contractor ‘instigated’ local inspectors to bring official ire down on Stephens’s haphazard fencing.

It is unsurprising, therefore, that engineers and contractors would try to shift blame and public outrage onto the other party in the aftermath of the 1867 monsoon. The heavy rains of that year claimed their first victims in late June, when Peck wrote to Stephens of a ‘frightful railway accident’ north-east of Bhusawal at Nimbhore. The misleadingly-named Sukhi (dry) River had risen at night and washed away an embankment, with perhaps 130 perishing in the subsequent derailment. On the 2nd of July the Times of India greeted the railway magistrate’s decision not to hold an official enquiry with insinuations of a ‘hush up’, before repeating the Indu Prakash’s allegation that the G. I. P. R. had been shoring up unsound...
masonry with planks of wood. Over the coming months the newspaper would pursue a trenchant campaign against the Company and especially its contractors, citing the spectacular collapse of the fifty-metre-high Mhow-ke-Mullee Viaduct on July 19th. Its focus later shifted to the ‘shaky bridges’ on Stephens’s own Nagpur Extension, which were also universally condemned by an independent engineer in 1868. Following Government’s controversial decision to assist the Company in funding reconstruction, what had begun as a ‘tragedy’ had become a ‘gigantic swindle’. The following words drew threats of libel action from Wythes & Jackson in February 1869:

If there is any man who has yet any vestige of doubt in his mind as to the real cause of so much disaster and ruin, or who has yet any faith in great contractors and their wise and honorable agents, if left to do as they like, or who believes in either the wisdom or energy of action of a railway Engineer, let him take a trip into Berar and see for himself the vile things that are there...

Noting the widespread use of petty subcontractors, the Times’s leader drew special attention to their purchase of defective or adulterated mortar from Indian suppliers. Probably against his better judgment, clearly Peck had been drawn into this low-level scamping. Unable to afford the charcoal to fire Stephens’s own lime kilns, he struck a deal with a local operator who burned wood (an inferior substitute), and used his larger capital to purchase fuel for the man at bulk prices. Corners were cut again when mixing the mortar. With scrutiny falling on him in July 1867, Peck protested to Stephens that he never allowed more than two measures of sand to one of lime (the Company’s contractually-specified ratio was 1½:1). Conditions were evidently tough. Peck complained that increased competition (‘Contractors are getting as thick as blackberries’), compounded no doubt by profiteers speculating in contracts, had forced tenders down to ‘miserably low’ levels. The pressure exerted by the Bombay press however, which by this point was ‘pitching into Engineers with a vengeance’, led to much blame being laid indiscriminately on either small-time contractors or Indian mortar producers. In Stephens’s case, it appears to have furnished old enemies with an excuse for blacklisting him. ‘My impression is they do not wish you to take more work on this district’, Peck explained, ‘owing I suppose to the rows you had with them.’

More work will be required to determine the long-term significance of 1867 for the nature of Indian contractors—though the Bombay P. W. D.’s despatches to London do suggest a

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47 Times of India, 2 and 3 Jul 1868. This was true: the Consulting Engineer, Colonel Kennedy, was well aware of shortcomings on the Nagpur Branch and had ordered that faulty bridges be reinforced before reconstruction could begin in earnest after the rains. See Maharashtra State Archives, P. W. D. (Railways), 1867, Volume 8, Compilation 186.

48 IOR/L/PWD/3/276 [enclosure to Bombay Railway Letter no.19, 5 March 1868]. Lieutenant Oldham, RE, described the section Stephens was principally active on—Chalesgaum to Pachora—as only mildly defective compared with the rest of the line.

49 IOR/L/PWD/3/66 [railway letter no.118 and accompanying letter]. The one dissenting vote on the Viceroy’s Council belonged to General Mansfield, who testified to the ‘bad, scamping work’ which he had ‘heard a great deal of’ in the Bombay Presidency.

50 Times of India, 5 Feb 1868.

51 Linn. Flb: 5 [G. B. Peck to Joseph Stephens, 26 Jul 1865 and 10 Jul 1867]; Flb:1 [contracts].

52 Linn. Flb: 5 [G. B. Peck to Joseph Stephens, 4 and 24 Jul 1867].
hotter pursuit of scampers and their official accomplices.\textsuperscript{53} It may well have hastened Stephens’s own departure. Another factor, however, was the end of a boom that had afforded him opportunities to diversify into a startling range of ventures. Besides railway contracting, he tendered (unsuccessfully) for an irrigation works near Pune, and over several years built cotton-processing facilities at Amravati and Khamgaon for the Mofussil Press & Ginning Company.\textsuperscript{54} With a Gujarati trading firm, Megji, Mulji & Co., and an Indian stationmaster whose access to the telegraph gave him up-to-date prices, he set up his own small cotton syndicate. Although this came to an acrimonious end when Stephens accused his partners of ‘swindeling [sic]’ him in the pages of the \textit{Indu Prakash}, a bilingual English-Marathi newspaper, he subsequently made at least one cotton shipment to London, pocketing 3500 rupees in 1866.\textsuperscript{55} He refrained from playing the stock market—‘had I been that way inclined I have had lots of chances of doing so’, he told his father—though a canny investment in one of Bombay’s land reclamation companies yielded a 1500 rupees profit.\textsuperscript{56} He considered speculating in linseed oil and, most enterprising of all, was possibly the first person to import dynamite into India—a newfangled Swedish invention of course, which his shipping agent Henry Rogers tested on the waterfront at Bombay: ‘Capt Ducat was thunderstruck... it was just as great a success under water as out of it’. ‘I have already had 2 men’, Rogers added, ‘offering me any thing I liked to ask for it’, but sadly the reluctance of the customs authorities to allow the powerful explosive to be unloaded put paid to this venture.\textsuperscript{57}

In the final analysis, such hard-headed and even cynical pursuit of profit offers us the most compelling ground for anti-contractor bias amongst anyone with some professional commitment to the Raj and its self-styled mission—not least John Abbott, who it seems bitterly envied his brother-in-law’s wealth. While Stephens fraternized with his railway peers, both contractor and Company, there is little evidence of social integration with the wider British community or subscription to its values. A suggestive passage in the 1860 diary has him watching—not participating in—a cricket match between a party from Nashik and one from Malegaon.\textsuperscript{58} Quite probably, he did not know how to play the game. And though his sister’s record is more detailed and descriptive, there is nothing resembling the passage in Ingeborg Abbott’s correspondence where she watches the 78\textsuperscript{th} Highlanders marching into Bombay city and gives thanks, echoed presumably by her English husband, for British victory in the rebellion. Certainly he did not echo his father’s misty-eyed projections for the railway, ‘a great weapon in the hands of Providence, for the spread of Christianity and civilization.’\textsuperscript{59} Self-reliance in a highly competitive marketplace would seem to have been his rationale, and by 1868 he summmed up his trade, for the professor’s benefit, with typical

\textsuperscript{53} IOR/L/PWD/3/240 [letters no. 11, 21, 29].
\textsuperscript{54} Linn. Fla:1 [letter from Public Works Department, 4 Feb 1864]; Fla: 7 [Mofussil Press & Ginning Company].
\textsuperscript{55} Linn. Fla:7 [Megji & Mulji]; Fla: 2 [Hugh Swan to Joseph Stephens, 6 Jun 1866].
\textsuperscript{56} Linn. El:2 [Joseph to George Stephens, 9 Oct 1868]; Fla:7 [Oriental Bank Corporation]. A fragment of newspaper in Flf:2 (\textit{Times of India}, 24 Jan 1868), suggests that Stephens was monitoring how the value of his shares in the Elphinstone Company might be affected by an ongoing controversy involving its land scheme and Government’s pending decision over the site of Bombay’s rail termini.
\textsuperscript{57} Linn. Fla:7 [Rogers & Co., 28 Oct 1864 and 11 Jan 1868].
\textsuperscript{58} Linn. Flf:1 [diaries], 22 Aug 1860. He may have played in a second match on 29 September.
\textsuperscript{59} Linn. El:8a [Ingeborg Abbott to George Stephens, 3 May 1859]; El:3a [George to Joseph Stephens, 19 Apr 1862].
candour: ‘the whole and sole interest is to get done with it as soon as one can and pocket the proceeds.’

Obtaining, retaining (and placating?) labour

From the Stephens archive emerges a picture of the 1860s Bombay Presidency as a vibrant but transient field of opportunity, created by a confluence of different factors. Perhaps its greatest value, though, lies in what it can tell us about labour management on the small-scale, everyday level. Though incomplete, the records are precise. Among Peck’s list of expenditures for work on Paras Station, for example, we find:

...carpenter, 11 annas; Luxman Danah for earth work on signals, Rs 3; Janoo Kutcha to a/c of lime, Rs 50; Mahdoo advd for lime, Rs75; Dad Khan for 5½ candies lime, Rs 74; blacksmith for several jobs, Rs 2; 3 cartmen 2 days, Rs 6; Purseram Ramjee for earth work & ballasting, Rs 10; Ransing Tileman, Rs 20; Durma Rama to a/c of chips for concrete, Rs 35; Damajee for 35 headers, Rs 5; Mr Moram to a/c of platelaying, Rs 150; Presented to Well men, Rs 6; Govinda Beldar to a/c of stone, Rs 50...

The list abounds in telling details. Probably undercapitalized, Mahdoo is taking advances for his lime and thus cannot raise prices; the specialist task of platelaying is performed by a European, Moram; danger-pay has been gifted to men digging a well. Purseram Ramjee and Govinda Beldar, it should be noted, are not labourers but muqaddams (or in the case of the latter, who bears the name of a stoneworking caste, a ‘maistry’) — that is, foremen directing a team of workers. As such, Purseram would have received perhaps twenty rupees per month and Govinda thirty, with their men (or women) receiving ten and twenty respectively. It is clear from Stephens’s own payrolls that masons typically earned twice or even thrice as much as ‘coolies’.

This documentation must surely remedy Ian Kerr’s regret that records ‘do not penetrate to the level of the gangs and the gangers’. Indeed, its goes further still. Generally it would appear that Indian subcontractors gave no more than their verbal assent, and that many Europeans would have shared Peck’s opinion: ‘do you think it advisable to have a stamped agreement. I think it matters very little.’ But in fact one folder in the archive contains a number of bargains drawn up stamp office paper, witnessed by clerks or sometimes Parsis who were pledging surety for the Indian parties, and compensating for their somewhat ad hoc nature with a measure of legal bluster:

60 Linn. EI:2 [Joseph to George Stephens, 17 Dec 1868].
61 Linn. Fla:5 [G.B. Peck’s accounts for Paras Crossing Station, Jan-Apr 1868].
62 Like sardar, the term used by Tirthankar Roy for gangers in mill and plantation work, muqaddam (मुकदम in Hindi) has an honorific inflection and could even denote a village headman. Roy’s multifaceted definition holds well for Stephens’s men, too: ‘in part a foreman, in part a headman, and in part a recruiting contractor’. Though one might add: in part a creditor. See Tirthankar Roy, ‘Sardars, Jobbers, Kanganies: The Labour Contractor and Indian Economic History’, Modern Asian Studies 42/5 (2008), p. 972.
63 Linn. Fie:1 [Payrolls].
64 Kerr, Building the Railways, pp. 119, 70.
65 Linn. Fla: 5 [G. B. Peck to Joseph Stephens, 5 Aug 1865].
This agreement made on the 28th September one thousand eight hundred and sixty-two, between John Smith Wells Subcontractor on the one part and Cheema Suttoo Wuddaree Contractor on the other party, witnesseth that the said Cheema Suttoo do hereby agree to supply stones for Bridges...66

Formal deals presumably gave Stephens useful leverage in holding defaulters to account (in some case penalties are stipulated), but I would suggest that such an exercise also served to establish a certain rapport with men like Cheema Suttoo—we will return to him and his ‘Wuddarees’ shortly. The introduction of this new evidence brings me to the heart of my argument on labour. The Linnaeus evidence underlines the vital role of middlemen in obtaining labour for this, along with so many other, colonial building projects67—but it also should lead us I think to identify the small contractor as a helpmeet, rather than a full-fledged partner of capital, who transacted with gangers as fellow-intermediaries. I aim to define this metier of Stephens in full by ratifying a number Kerr’s core hypotheses, while also complicating the picture he paints of the contractor-muqaddam-labourer relationship.

Railway construction was a seasonal business and, with machinery underused in India well into the twentieth century, one that each year swept its net wide across the provinces to draw in the tens of thousands of hands needed to shape its designs. It was also in competition with other sources of manual employment: principally agriculture, but also public works projects such as canals which benefited from Government’s capacity to impress labour. Contractors in need of a workforce, therefore, that could be mobilized in a swift and timely fashion, that would not desert its employer, and whose return could be expected the following season, began to draw a distinction between ‘reliable’ and ‘unreliable’ sources of labour. Kerr stresses however that ‘reliable’ manpower was, counter-intuitively, not recruited from districts bordering the line—on the contrary, village power-holders or agrarian priorities had a way of recalling locals at inconvenient moments.68 Railwaymen favoured instead itinerant, specialist communities that would often be best understood not as ‘migratory’ but as ‘circulating’ groups: either returning from the ganger’s to the farmer’s life only at uncertain intervals, or indeed shifting continually between construction projects with no fixed village.69 As Ravi Ahuja has made plain, we should not think of footloose manpower as a singular outcome of colonial modernity.70 Such groups had long served the needs of tank-digging and irrigation work in Southern India and the Deccan, and aligning their programme with this established labour economy during the early 1860s was a significant step by which engineers upped their efficiency through, as Kerr makes clear, ‘adapt[ing] to Indian conditions’. 71

Perhaps the most prominent such group was the constituency represented by muqaddam-cum-contractor Cheema Suttoo, known to Stephens as the ‘Wuddarees’, ‘Woddaries’ or

66 Linn. Fl:1 [Contracts].
68 Kerr, Building the Railways, pp. 91-92.
71 Kerr, Building the Railways, p. 152.
‘Woodaries’, and to ethnological guides as the Vadar, Vadda, or Odde. When the Bombay Quarterly Review cited them, too, as an argument in favour of the contract system, the keyword was ‘pertinacious’: it portrayed a close-knit, inscrutable, aboriginal community, ‘old as the hills’, with set habits to which the pragmatist must reconcile himself. They keep their own hours and will only take task work, the Quarterly remarked, not employment by the day—a custom that actually boosted their reliability, contractors would come to realize. Husband, wife and child work together, and all it seems are accustomed to receive a parting gift in return for reappearing the subsequent year. Arthur West had witnessed their capacity to mobilize when surveying potential routes for future lines in 1851: at his behest one Mokaria set to work on a drain with six others on the evening of November 8th. By the next day there were thirty at work, by the day after fifty, by the 11th eighty and by the 12th one hundred men, women and boys. Interestingly, this arrangement went counter to a P. W. D. general order West had received ten months earlier, instructing him to steer clear of this quarrelsome and disloyal group. Indeed, though the stoneworking Vadars seem to have received more respect than their separate, earthworking counterparts, these ‘navvies of India’ and their vagabonding lifestyle are often handled with a suspicious and derogatory tone in official discourse. Edgar Thurston describes them as coarse and hard-drinking, and fond of using their crowbar skills to effect night-time entries into respectable homes. Ananthakrishna Iyer accused them of absconding with their employers’ advances, while Manwaring’s Marathi Proverbs contains this jagged-edged gem:

वडारीचा भोगा फटकराचा सोगा. A Vadāri's adornment is a trailing coarse blanket.

The Criminal Tribes Act did not come into force until 1871, and even then not in the Bombay or Madras Presidencies. But ‘Wuddias’ and ‘Bildars’ [Beldars] were already being sized up in 1859, when they were described as ‘vagrant tribes’ in the halls of government, and some recent disturbances at the Bhore Ghat works blamed on their ‘wildest and most uncivilized habits’. Ultimately they would be deemed, in both jurisdictions, ambiguously criminal. Handbooks in Madras identify one roguish sub-caste (the ‘Donga Woddars’) and exonerate the rest, while Kennedy’s well-known Bombay Notes of 1908 sees the whole population on a

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73 ‘Railways in Western India’, p. 299.
74 Kerr, Building the Railways, pp. 190-91.
75 IOR/Eur.Mss.D.1184.3 [memoranda and occasional journal of Arthur West], pp. 43-44.
76 Ibid., order no. 493 of 1850.
sliding scale of criminality—an attitude borne out in the various Vadar groups represented within the forced settlement camps which were set up, three years later, under the second Criminal Tribes Act.\(^{82}\)

Stephens’s records provide day-to-day illustration of his coming to terms with the Vadars when, as Kerr conjectures, they had just begun to extend their operations into Central India in the track of the railways.\(^{83}\) Perhaps his most sustained relationship came when building small bridges between Nandura and Shegaon on the Nagpur Extension, during which Vadars set up their camps close to the quarries from which they supplied his ballast (‘on the road saw Babagee Wooddary and his gang pitched at Lanjuhr’).\(^{84}\) His diaries reveal what could previously only be partially inferred from the West journal. The Vadars’ efficiency and internal discipline made them eminently ‘reliable’, but also enabled them to stage organized protest. Disputes constantly arose over the agreed size and shape of quarried stone:

...they made a noise about me not giving them enough measurement and I stopped measuring and Wells as usual took their part and I told him a bit of my mind which he evidently did not like...\(^{85}\)

A frequent occurrence, moreover, was for Stephens to return home to find an entire Vadar group clustered sullenly around his bungalow, waiting for him to tally their accounts and settle their payment. ‘Rows’ and ‘talkings to’ often ensued, with Stephens sometimes choosing to ‘cheer them up’ with one of the bottles of brandy he ordered from downcountry (he himself seems to have mostly abstained).\(^{86}\) Sensing weakness, Peck’s Vadars later successfully extracted advances by threatening to halt work (consequently, he seems to have rectified his earlier indifference to written agreements). But nevertheless, the gangers’ all-night labours were vital to Stephens’s aforementioned ‘scheme’ to conceal bad work from an inspector, and they had the skills to supply him with shaped masonry like arch-groins and culvert covers.\(^{87}\) Such was their mutual dependence, one wonders if some of the Vadars’ alleged misdeeds—as when ten were charged with a burglary at Khamgaon—also tarnished Stephens’s reputation.\(^{88}\) Another dimension is added to anti-contractor sentiment when we consider that the administrator’s disdain for the interloping, possibly foreign railwayman may have been in some way analogous to his suspicion of roving ‘criminal tribes’.

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\(^{84}\) Linn. Flf:1 [diaries], 20 Oct 1862. Lanjud is about 4km west of Jalambar Junction station. Itinerant gangers’ habit of setting up camp where they saw fit was also a source of concern to the police: see Maharashtra State Archives, P. W. D. (Railways), Volume 26, Compilation 227.

\(^{85}\) Linn. Flf:1 [diaries], 14 Feb 1863.

\(^{86}\) Ibid., 24 Mar 1863.

\(^{87}\) Linn. Flf: 5 [G. B. Peck to Joseph Stephens, 10 Aug 1865]; Flf:1 [diaries], 14 Mar 1863.

\(^{88}\) Ibid., 21 Mar 1863 and 1 Apr 1863. Stephens did not it seems intervene but exploited the incident, and the prospect of the magistrate at Akola, to ‘frighten’ the suspects’ fellows and obtain compliance.
The Vadars’ habit of ‘making noise’ brings us to the matter of outright striking: ‘Some of Wells men jacked up work wanting more pay’, notes Stephens on one occasion; and on another, ‘the masons struck work’.  

Tools were downed all too frequently in the 1850s and 1860s in retaliation for non-payment of wages, Kerr identifying this as another consequence of putting so much work into the hands of unknown men with little or no capital.  

It was also common to retain workers by purposefully withholding wages. Noting in 1868 that several well-diggers would abandon their dangerous task if he didn’t pay them in arrears, Peck found himself walking the usual contractor’s tight-rope between discontent and desertion.  

But while Kerr’s examples of striking are drawn almost wholly from major bridge and viaduct works, where protest was ‘crushed’ and troublemakers swiftly ‘put back to work or replaced’, the Stephens record is one of small-scale resistance met with little coercive power or official backing.  

Indeed, disputes often played out face-to-face with the muqaddams. In March 1863, Stephens was called before the magistrate at Akola following complaints of non-payment by John Mahomed of Shegaon, though the case was dismissed when the plaintiff failed to appear. A more persistent nemesis was Sultanbhoy, maistry of a gang of masons, who first appears in April 1863 when his men at Jalamb refuse to proceed with work on the grounds of ‘a native holiday’. Stephens’s move to replace him with a rival, Ibrahim, at first brings repentance but later, on 18 May, an embarrassing snub ‘in presence of Louis [Pereira] and one of Peragies men’. A compromise offer to release enough cash for his men to buy food is turned down the following evening, and in the dispute’s poignant and comic climax Sultanbhoy arrives at the bungalow on 22 May demanding to see ‘the time sheets’. When Stephens denies him access to this documentation, the maistry enacts his parting revenge by refusing to return some ‘tankys’ (chisels) that his men had borrowed from the stores.  

It is a pity the archive does not offer more narratives of this kind, but Stephens’s itineracy between various worksites, including two trips to Europe, and above all the absence of the 1864–69 diaries makes it difficult to trace developing—or deteriorating—relationships with indigenous actors. Cross-referencing different classes of documents does yield some intriguing aperçus, however. Cheema or “Chimma” is seen first in October 1862, when Stephens gives him some steel, presumably in connection with the contract for stones he had signed the previous month. Trusted supplier, he appears again in Peck’s correspondence for August 1865, being advanced Rs 200 at Badnera, some 120km east of where he first struck a deal with Stephens and Wells. A degree of affection or at least recognition of seniority is suggested by Peck’s referring to him, parenthetically, as ‘Bappoo’ (father)—he could even be ‘the old Woddary’ to whom Stephens gave a Rs 5 bonus, and ‘nothing’ to the others, during Holi in 1863.  

A beldar called Mullaree spans an even broader period, 1863 to 1868—and this in spite of his arrest for housebreaking. This would certainly suggest that partnerships

89 Ibid., 7 Jan 1862, 29 Oct 1863.  
90 Kerr, Building the Railways, pp. 179-80.  
91 Linn. Fla: 5 [G. B. Peck to Joseph Stephens, 5 Mar 1868].  
92 Kerr, Building the Railways, pp. 183.  
93 Linn. Flf:1 [diaries], 7-9 Mar 1863.  
94 Ibid., 21, 23 April and 18-22 May 1863.  
95 Ibid., 21 Oct 1862, 8 Mar 1863; Fla: 5 [G. B. Peck to Joseph Stephens, 5 Aug 1865].
with vadar masons or beldars (but not necessarily excavators) could prosper, and perhaps were more likely than others to prosper, over the long term. Of course it cannot be said with complete certainty that these are indeed the same men, though identity is certain at least in the case of shopkeeper-subcontractors like Dadabhoy Dorabji and his subordinate Gabriel Matthew de Braganza. Stephens probably met or knew of this enterprising Nashik merchant during his first residence in and around that city, and as bills attest he and Pereira continued to depend on the Parsi both for cut stones as well as petty needfuls like sardines and brandy.96 Most intriguing of all is the enigmatic ‘Venketish’, who appears to have acted as clerk, labour boss, supplier of firewood and cottonseed oil, and possibly even bungalow landlord.97

The confrontation with Sultanbhoy was perhaps the fruit of inexperience. The agent Charles Brandt’s letters three years afterward show a greater understanding of muqaddams and their ways, both in respect to advances, often requested but not always granted, and absences (the apparent desertion of some coolies to a rival contractor turns out to be ‘a play’, or exchange of manpower, between two muqaddams).98 The former is of particular importance. Foremen would often have enticed their gangs with an initial advance and paid them subsequently in arrears, borrowing perhaps from local moneylenders, and creating a nexus of credit without which the swift mass-mobilization that Arthur West witnessed in 1851 may well not have been possible. The ‘native holiday’ is also a case in point. In 1851 William Faviell had told Godfrey Mann that engineers did not go out to India ‘to be Gentlemen’, leaving Henry Fowler to fret that his partner’s policy of treating the men ‘like dogs... will operate sadly against us’.99 But the Stephens archive offers some evidence of greater cultural sensitivity post-1857. John Abbott, probably recollecting that the rebellion which had sent him fleeing downcountry had commenced during Ramadan, upbraided his brother-in-law on this matter seven months after the youngster’s arrival.

It is the third day of the Mohurrum, an [sic] Mussulman festival, just before breakfast came a whole troup [sic] of Natchwallas with a bear, two boys danced and one of the men fought with the bear, just as they left there came a second lot mostly dressed as women who danced [sic] an African danse, they had nearly all got sticks with which they struck the ground as they danced, just as they left a third lot arrived with a man dressed like a tiger. I would not see them, which made John so angry that he said he would have me with him no longer. I wrote a letter to him telling him that I had not intended to offend him and begged his pardon.100

Stephens is more circumspect of his masons’ Muharram observances three years later,101 and takes care on all festivals to distribute at least some ‘cherry-merry’ or small gifts [चिरिमिरी = baksheesh, Marathi]. Like the bonus Peck paid to his well-diggers, or the brandy given to Vadars and carters, such sweeteners were used to reward and placate workers—perhaps even, it seems, to compensate the productive while excluding the idle—and also to

96 Ibid. [bill, 8 Jun 1866]; Fla:1 [bill, July 1864].
97 See Linn/Ffl:1 [diaries], 9 Jan 1862, 6 Feb 1862, 6 Mar 1862 and Fle:1 [Payrolls], April 1861.
98 Linn. Fla: 2 [Charles Brandt to Joseph Stephens, 24 Sept 1866].
100 Linn. Flf:1 [diaries], 28 Jul 1860.
101 Ibid., 27 Jun 1863.
build rapport or loyalty. Kerr uses Marx’s concept of formal subsumption to describe how railway builders had to negotiate a labour economy governed by both ‘capitalist and pre-capitalist forces and relationships’, learning to link ‘down and across these different structures’.\textsuperscript{102} To conclude by proposing a route for future research, it is tantalizing to speculate how much of Stephens’s hard-won experience was gained through observation of the Indians around him. An innovative, hybrid approach may even have garnered praise—’[M]uch might be learnt on both sides’ noted the \textit{Bombay Quarterly Review}, comparing the European contractor’s use of locomotives and mechanical helps with Jamshedji Dorabji’s knack for establishing supply chains with local villagers, ‘by means which would never have entered the mind of a European.’\textsuperscript{103} And if he is more likely to have mimicked his own muqaddams than the Parsi entrepreneur, a contemporary sociologist working in a Pune slum provides a suggestive analogy. Ratna N. Rao recorded very similar modes of patronage among Vadar muqaddams and their work-teams in the 1980s, the former attaining their position by virtue of saving up the capital needed to extend advances, but also cementing alliances with gifts of paan and cigarettes.\textsuperscript{104} Whether or not Joseph Stephens consciously imitated any Indian peer, it is telling to see him falling in to these accommodative arrangements of clientage and mutual obligation with his often fractious labour force. More work will be needed to uncover the full significance of the early, small, independent contractor, in other fields as well as the railways. Such men were agents of modernity not formally affiliated with the imperial project, or even necessarily subscribing to ideals of imperial progress and duty. They were free to sublet and speculate, but also forced to bargain with merchants and strikers with little outside support. Theirs is a record of specialization and complex negotiations at the local level, carried out at a time of political upheaval and amidst the cosmopolitan, profiteering free-for-all that was the cotton boom.

\textsuperscript{102} Kerr, \textit{Building the Railways}, pp. 9, 55.
\textsuperscript{103} ‘Railways in Western India’, p. 288.
\textsuperscript{104} Ratna N. Rao, \textit{Social Organisation in an Indian Slum} (Delhi: Mittal, 1990), pp. 63-64.